VX Series Owner's Handbook.

COMMODORE

CALAIS

HOLDEN

www.holden.com.au

Owner's Name ....

Address ....

Town ....

State......................Postcode ....

Model Name ....

Reg. No........................Eng. No. ....

Odometer Reading ....

Date of Purchase ....

(17 character I.S.O.V.I.N.) Vehicle Identification Number ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Vehicle Identification Certificate

Selling Dealer's
Stamp & Signature

Holden Ltd. A.C.N. 006 893 232 (hereinafter Holden).

Change of name, address or ownership

In the event of a Safety Recall, or for various reasons, Holden may need to contact you as the owner of this car. Also, if less than three years old, this car will qualify for Roadside Assistance, refer Chapter 9. If you have recently changed your address, or name, or purchased this car second-hand, please help us to help you by taking a few minutes to fill in and mail the form on the third page of this handbook.

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We thank you for choosing Holden and want to assure you of our continuing interest in your driving pleasure and satisfaction.

This handbook applies to the current VX model. Therefore, due to different models and options you may find reference in this Handbook to some equipment not fitted to your own car.

Please note that all information, illustrations and specifications in this Handbook are based on the latest production information available at the time of printing. Holden reserves the right to make changes at any time without notice and without incurring any obligation.

Reference is made throughout this Handbook to different engines:

- V6 3800 (V6)
- SUPERCHARGED V6 (V6 supercharged)
- 5.7 ALLOY V8 (V8)

If unsure of which engine is fitted to your car, please lift the bonnet and check the identification on the top of the engine.

CHANGE OF ADDRESS OR OWNERSHIP

Please fill in the form below if you have changed your name, address, bought the car second-hand, or have become the new driver.

Holden requires these details in order to contact the operator in the event of a safety recall and to keep the initial 3 year Roadside Assistance details up to date (refer Chapter 9).

Please mail to the address on the back of this page.

Please tick the appropriate box:

☐ Original Owner ☐ Subsequent Owner

Title: (Mr, Mrs, Miss, Ms, etc.)

First name in full or initials

Surname or Name of Company/Institution/Government Department

Address

Street/box

City/Town

State

Postcode

Car registration number

ISOVIN Number (see Chapter 8)

Place in an envelope and mail to:

The Manager - Warranty Administration
Service Department
Holden Ltd
Box 548D, G.P.O.
Melbourne
Victoria, 3001

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CHAPTER 1

Dash board

The following page illustrates the dash board, identifying the gauges, warning lights, controls and switches. Page reference numbers are listed next to each item.

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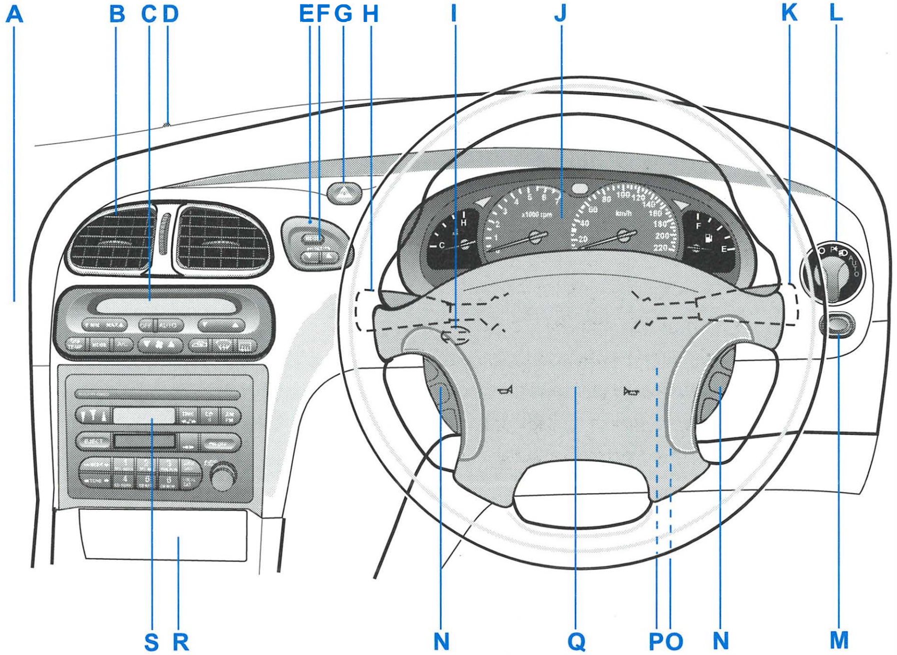
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GAUGES

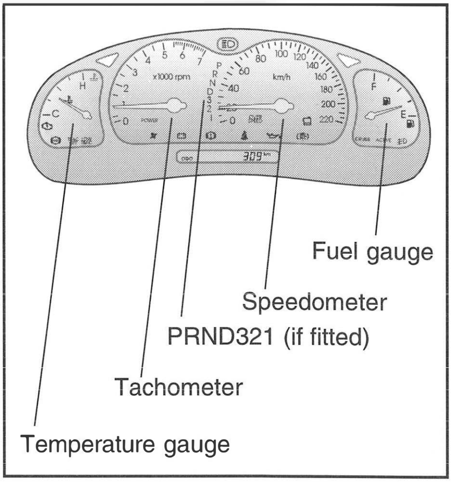
Speedometer

The speedometer shows vehicle speed in kilometres per hour.

Tachometer

The tachometer shows engine speed in revolutions per minute (r.p.m.). Sustained operation in the RED zone may cause serious engine damage.

Automatic transmission: Under wide open throttle acceleration (accelerator pedal pushed flat to the floor) it is possible that the tachometer needle may briefly touch/enter the lower end of the tachometer's red zone just prior to automatically upshifting into a higher gear. This is normal during wide open throttle and will not harm the engine.



Fuel gauge

The fuel gauge shows the level of fuel in the fuel tank when the ignition is switched ON.
E = empty F = full.

NOTE: Small additions of fuel (less than 15 litres) may take up to 10 minutes to register on the fuel gauge; larger amounts will show up almost immediately. This is designed so that fuel movement, when cornering, will not register on the gauge.

Also refer to Chapter 5, *"FUEL"*.

Temperature gauge

The temperature gauge indicates the engine coolant temperature when the ignition is switched ON.

Stop/start driving in heavy traffic, driving at high speed in warm weather, hill climbing or towing may cause the needle to move toward the “H”. This is normal, and is not cause for concern. However, if the needle should move all the way to “H” and remain there for more than 30 seconds, you should stop the car as soon as it is safe to do so.

Also refer Chapter 6, *"OVERHEATING"*.

PRND321 (if fitted)

Shows the selector position of the automatic transmission when the ignition is switched to ON.

Illumination of the gauges is adjusted by moving the tab on the side of the "headlights dial", refer "Lights" later in this Chapter.

WARNING LIGHTS

Battery!

To check that the warning light is working, the symbol is displayed when the ignition is turned to ON - until the engine is started.

If the symbol illuminates when driving, it indicates that the generator is not charging and you should see your Holden Dealer.

ABS OFF

To check that the warning light is working, the symbol is displayed for a short time when the ignition is turned to ON.

If the symbol illuminates when driving, a malfunction of the Anti-lock Brake System is indicated. The car's brake system will still operate conventionally, only the anti-lock operation is impaired, refer Chapter 4.

Rear light bulb failure (if fitted)

If the symbol illuminates while the park/head lights are on, then a bulb failure of the tail lights is indicated.

If the symbol illuminates while the brake pedal is depressed, then a bulb failure of the brake lights is indicated.

If the symbol illuminates while the brake pedal is *not* depressed and the lights are *off,* then a fuse failure of the brake lights or tail lights is indicated.

Check power-train!

To check that the warning light is working, the symbol is displayed for a short time when the ignition is turned to ON.

If the symbol illuminates while driving, it indicates a fault in the electronic engine management system or the automatic transmission (if the car is an automatic). Although the car may still be driveable, it is recommended you reduce load on the power train, i.e., reduce driving speed, don't tow heavy loads or heavily load the car.

You should have the problem fixed as soon as possible. Only your Holden Dealer has the correct diagnostic computer equipment and training to find and fix the problem.

Oil pressure!

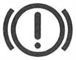
To check that the warning light is working, the symbol is displayed for a short time when the ignition is turned to ON.

If the symbol illuminates when driving, it indicates that the oil pressure is dangerously low. Stop immediately and check the engine oil level. Do not run the engine with this symbol illuminated. If the oil level is normal, have the system checked at your nearest Holden Dealer.

The audible warning chime is designed to bring this condition to your attention.

WARNING LIGHTS cont.

Park brake and brake fail!

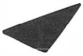


To check that the light is working, the symbol is displayed when the ignition is first turned ON and the park brake applied.

If the symbol illuminates while driving *and* the park brake is released, a fault with the brakes is indicated. You should immediately stop the car on the side of the road as carefully as possible. Do not proceed until satisfied that braking is possible or that the cause of the problem has been fixed.

A warning will chime if you attempt to drive off without releasing the park brake.

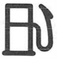
Turn signals



The appropriate arrow flashes when the lever on the right side of the steering column is moved up or down *and* the ignition is turned to ON.

- Both arrows flash when the Hazard Warning Flasher is switched on, refer further in this Chapter for information on the Hazard Warning Flasher.
- The indicators flash at a quicker rate if a globe has blown.

Low fuel



To check that the warning light is working, the symbol is displayed for a short time when the ignition is first turned ON.

When driving, this symbol is displayed when the fuel level is low. To bring this to your attention, a warning chime will be heard and the Trip Computer displays its calculation of kilometres to empty for 10 seconds. Refer to "Trip Computer" further in this Chapter.

When the fuel level is nearly empty the symbol flashes for a short time, emphasised by the warning chime.

OVERSPEED

**OVER
SPEED**

To check that the warning light is working, the symbol is displayed for a short time when the ignition is first turned ON.

OVERSPEED is designed to warn you when you have exceeded your pre-selected speed. A warning chime is heard when this symbol is displayed, reminding you to slow down.

For 10 seconds after the symbol is shown, the Trip Computer displays OVERSPEED. This is to show what your pre-selected speed is and allow you to adjust it if required.

When you are 15 km/h over your pre-selected speed the warning light starts to flash.

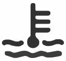
The speed warning can be adjusted up or down (or completely turned off) via the Trip Computer, refer further in this Chapter for information.

WARNING LIGHTS cont.

Over temperature!

Cars fitted with a single window trip computer have an over temperature message built into the trip computer, which reads "HOT" if the engine overheats. The message will only be displayed for 10 seconds, refer page 1-15.

HOT

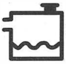


Higher luxury cars (fitted with a triple window trip computer) have the over temperature warning symbol in the dash.

To check that the warning light is working, the symbol is displayed for a short time when the ignition is first turned ON.

If the symbol illuminates when driving, it indicates that the engine coolant temperature is dangerously hot. You should stop the car as soon as it is safe to do so. Refer Chapter 6 for overheating instructions. The audible warning chime is designed to bring this condition to your attention.

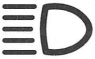
Low coolant (V8 engines only)



To check that the warning light is working, the symbol is displayed for a short time when the ignition is first turned ON.

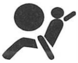
If the symbol illuminates when driving, it indicates that the engine coolant level is very low. You should check the level as soon as possible, refer Chapter 7.

High beam



This symbol illuminates when the headlight high beams are in use.

Air bag and seat belt pre-tensioners



To check that the warning light is working, the symbol is displayed for a short time when the ignition is first turned ON.

If the symbol illuminates while driving, it indicates that the air bag system or seat belt pre-tensioner system may not function correctly, especially in an accident and you should see your Holden Dealer immediately.

The warning light illuminates after an accident where the pre-tensioners, or pre-tensioners and air bag(s), have activated.

For more information, refer to Chapter 6 for air bags or Chapter 3 for seat belt pre-tensioners.

Power shift (with automatic transmission)

POWER

The automatic transmission POWER symbol is displayed when the transmission is operating in the power mode, refer Chapter 4.

Cruise control (if fitted)

CRUISE ACTIVE

The CRUISE symbol is displayed when the cruise control is activated and ready for use. Both the CRUISE and ACTIVE symbols are displayed when the cruise control is maintaining car speed.

Refer further in this Chapter for information on the cruise control.

WARNING LIGHTS cont.

Traction control (if fitted)

TRAC OFF **LOW TRAC**

To check that the warning lights are working, the symbols are displayed for a short time when the ignition is turned to ON.

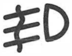
If the TRAC OFF light illuminates while driving, it indicates the traction control system is not working and you should see your Holden Dealer.

If the LOW TRAC light flashes while driving, it indicates that the traction control system has sensed that your car requires help with road grip and that the system is actively working to stop any slipping.

Refer Chapter 4 for more information on the traction control system.

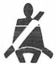
Fog lights (if fitted)

This light illuminates when the fog lights are working. Refer further in this Chapter for information on the operation of fog lights.



Seat belt

A seat belt warning light is displayed for a few seconds when the ignition is first switched ON. The seat belt warning light is designed to remind occupants to fasten their seat belts.



LPG (if fitted)

The light illuminates when the car is running on LPG. Refer to separate information supplement in the glovebox if your car is fitted with LPG.

LPG

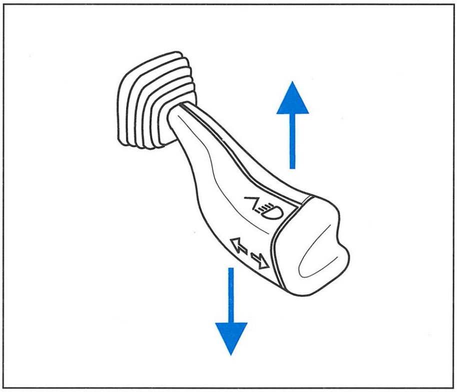
TURN SIGNALS, HORN, TILT STEERING

Turn signals

The turn signals lever is on the right side of the steering wheel column. Push the lever up to signal a left turn, down to signal a right turn.

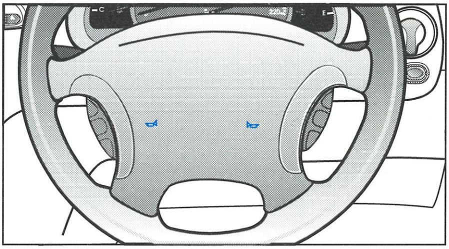
In some turns (such as changing lanes) the steering wheel is not turned far enough to cancel the turn signal. So, to indicate a lane change, move the lever part way and hold. The lever returns to the neutral position when you release it.

A green arrow on the instrument panel flashes when the lights are in operation.



Horn

The horn is activated by pressing the centre of the steering wheel.



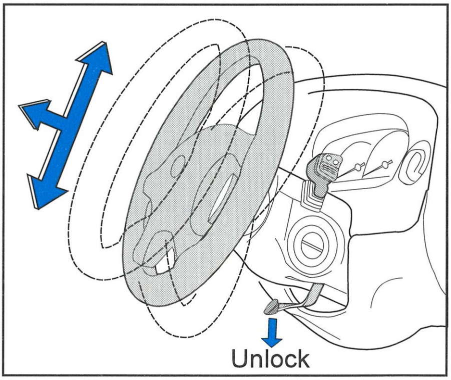
Tilt/telescopic steering

Move the lock lever under the steering column down.

Grasp the steering wheel and move as required. It can be moved up or down, pulled towards you or pushed away from you.

When in position, move the lock lever up. "Jiggle" the steering wheel to ensure it has locked securely before driving.

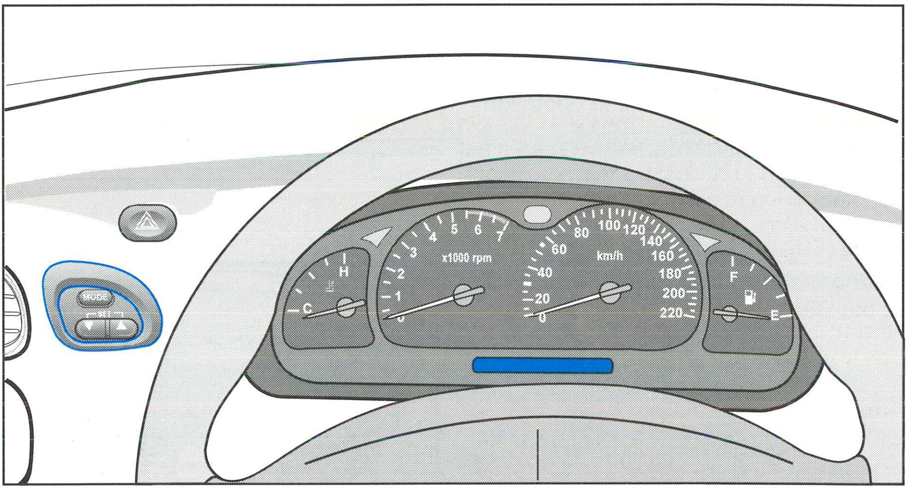
CAUTION: As with all the other driver position controls, do not attempt to adjust the steering wheel while driving.



TRIP COMPUTER - SINGLE WINDOW TYPE

Two types of trip computers are available. Depending on your luxury level, your car is fitted with a *single* window trip computer or a *triple* window trip computer. Explanation regarding the triple window type is found further in this chapter.

Note that the flashing light above the switches for the trip computer is for the security system, refer Chapter 2 "Locks".



The buttons for the trip computer are located to the left of the gauges and the single window for the trip computer is located directly beneath the gauges.

When the ignition is turned on, the display is the same as when the ignition is turned off.

The basic, more commonly used functions of the trip computer are shown on the facing page. Tap the MODE button to scroll between these four displays.

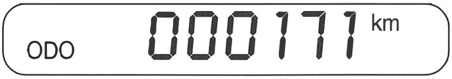
Additional, more complex functions are provided in the trip computer for the more technically minded owner. Details are shown over the page.

Note that if the wrong buttons are accidentally pressed, causing the window to show other than normal, turn the ignition OFF then ON again when the car is standing still.

TRIP COMPUTER - SINGLE WINDOW TYPE cont.

Odometer

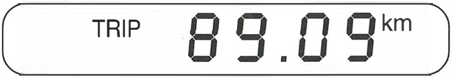
The odometer records kilometres travelled since the car was built.



TAP MODE BUTTON

Trip

Shows the kilometres travelled from the start of a particular trip. Reset the reading to zero by pressing the ▲ and ▼ buttons together when this window is shown.

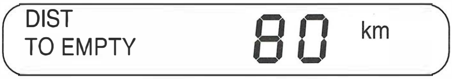


TAP MODE BUTTON

Distance to empty

DISTANCE TO EMPTY is a estimate of how far your current fuel level will last. It is based on your previous fuel usage and is frequently updated. Therefore, as conditions become suited to more economical driving the DISTANCE TO EMPTY may actually increase, for example from city to highway driving.

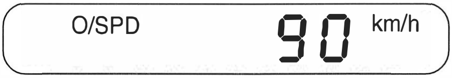
In addition, movement of fuel in the tank can cause the reading to fluctuate when the fuel level is low.



TAP MODE BUTTON

Overspeed

Set the speed you don't want to exceed. For example, if driving in a 90 km/h zone, set OVERSPEED to 90, by tapping the ▲ or ▼ buttons. When car speed exceeds 90 km/h the OVERSPEED warning light in the instrument panel and an audible chime warns you that you are speeding. At that time the trip computer automatically shows this display, allowing you to make adjustments if required.



OVERSPEED is adjustable in 5 km/h units and works at speeds between 20 km/h and 200 km/h. Tap the ▲ or ▼ buttons as required or hold a button to scroll quickly to a speed. Briefly press the ▲ and ▼ buttons together to set the OVERSPEED to the speed at which the car is currently travelling.

Press and hold both the ▲ and ▼ buttons for at least 2 seconds (when this display is showing) to turn the OVERSPEED warning on or off.

OVERSPEED "presets" can also be chosen, refer "OVERSPEED - PRESETS" over the page.

TRIP COMPUTER - SINGLE *WINDOW TYPE cont.*

Additional functions

The basic, more commonly used functions of the trip computer are shown on the previous page.
The following information is provided about the additional, more complex functions that have been provided in the trip computer for the more technically minded owner.

Customise mode

The trip computer features can be customised. When the car is stationary, hold down the MODE button while turning the ignition from OFF to ON. The trip computer then steps you through a series of choices:

***CHOICE 1*:** ODO (odometer) window shown or skipped. Use the ▲ or ▼ button to select "yes" or "no" as to whether the odometer is displayed when the ignition is ON. Note that the odometer still counts in the background (and appears when the ignition is OFF), even if the display is set to "no". When the display is flashing on your selection, press the MODE button to go the next choice.

***CHOICE 2*:** TRIP distance - feature available or skipped. Use the ▲ or ▼ button until your choice is flashing. Press the MODE button to go to choice 3.

***CHOICE 3*:** DISTANCE TO GO - feature available or skipped. This is the choice to activate an additional set of displays: DISTANCE TO GO and TIME TO GO. These additional displays are explained on the next page. Use the ▲ or ▼ button until your choice is flashing. Press the MODE button to go to choice 4.

***CHOICE 4*:** Adjust DISTANCE TO GO default setting. The DISTANCE TO GO can be reset (when not in customise mode) by pressing the ▲ and ▼ buttons together. The distance resets to 500 km, which is the default setting. When in customise mode, choice 4 enables the default setting to be altered up or down with the ▲ or ▼ buttons. When correct, press the MODE button to go to choice 5.

***CHOICE 5*:** UNDERSPEED chime. OVERSPEED provides a chime when your travelling speed exceeds OVERSPEED chosen speed. Another chime can be activated to indicated when travelling speed again drops below OVERSPEED. Choice 5 in customise mode is to turn the second chime, the "underspeed" chime off or on. Use the ▲ or ▼ button until your choice is flashing. Press the MODE button to end customise mode.

If you wish to activate customise mode again, turn the ignition OFF, then turn ON while holding down the MODE button. Customise mode ends automatically if car speed exceeds 10 km/h or if the ignition is turned OFF and ON.

TRIP COMPUTER - SINGLE *WINDOW TYPE cont.*

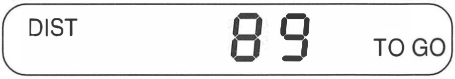
Additional displays

Two additional displays can be activated using customise mode, refer previous page. DISTANCE TO GO and TIME TO GO are turned on and off as a set, they cannot be individually activated.

When activated, press the MODE button to scroll through the Trip Computer displays. There is now 6 displays instead of 4. The new displays are slotted between the TRIP display and the DISTANCE TO EMPTY display. Customise mode can be used to deactivate the displays, if required.

Distance to go

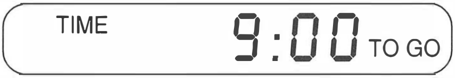
At the start of a trip estimate your distance to arrival (from maps, road signs etc.). Tap the ▲ or ▼ buttons until the display shows your estimated trip distance. When you drive off, the trip computer constantly updates your time to arrival, based on changing driving speeds. You can use the ▲ or ▼ buttons to adjust the kilometres any time this display is shown.



TAP MODE BUTTON

Time to go

Shows time to arrival in hours and minutes. TIME TO GO is only shown if the DISTANCE TO GO is more than zero.



Even if DISTANCE TO GO is turned off using customise mode, it can still be temporarily turned on by the following quick method:

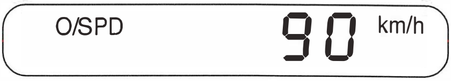
> Press MODE button until the TRIP display is shown, press the ▲ and ▼ buttons together to zero the trip display, then increase the distance up by pressing the ▲ button.

However, when the trip distance reaches zero the function is turned off again. Use the customise mode to permanently turn the above displays on.

TRIP COMPUTER - SINGLE *WINDOW TYPE cont.*

OVERSPEED adjusting

Instead of adjusting OVERSPEED up and down in 5 km increments (see previous pages), you can set 4 commonly used speeds, e.g. 60, 80, 100 and 110.



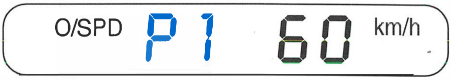
normal OVERSPEED

Hold down the MODE button for 2 seconds when the OVERSPEED display is shown. The display changes from normal OVERSPEED to OVERSPEED PRESET.

Hold MODE button for 2 seconds

P1 is the first preset number, with a default setting of 60 km/h.

Tap the ▲ button to see the second preset, P2, which has a default setting of 80 km/h, P3 has a default setting of 100 km/h and P4 of 110 km/h. Tap the ▲ or ▼ buttons to move between the preset numbers.



OVERSPEED PRESET

The OVERSPEED PRESET display has now replaced the normal OVERSPEED display in your set of displays. Tap the MODE button to scroll through the other displays.

To change the display back to normal OVERSPEED, hold down the MODE button for 2 seconds while the OVERSPEED PRESET display is shown.

Altering OVERSPEED PRESETS

The default settings of 60, 80, 100 and 110 km/h can be changed for your individual preference.

The car must be standing still when changing OVERSPEED PRESETS. To alter, ensure the preset you wish to change is showing, e.g. P2 80 km/h. Then, briefly press the ▲ and ▼ buttons together. The display starts to flash. Use the ▲ or ▼ button to adjust the setting. When correct, briefly press the ▲ and ▼ buttons together. Each preset can be changed in this way.

The presets are automatically arranged in ascending order.

One or more presets can be assigned to "OFF", by reducing the preset down to "0" (OFF). When driving, you will then only have 3 or less presets to choose from. To turn back on, select the "OFF" preset (when the car is standing still) and use the ▲ button to increase the number.

OVERSPEED PRESETS must be altered when the car is standing still. If the ▲ and ▼ buttons are briefly pressed while driving, the OVERSPEED setting is changed to the speed at which you are travelling (in multiples of 5 km/h).

If the ▲ and ▼ buttons are pressed for 2 seconds, either while driving or standing still, OVERSPEED is turned completely OFF or ON.

TRIP COMPUTER - SINGLE *WINDOW TYPE cont.*

Service Due

A service reminder message is built into the trip computer.

The reminder message first appears 1,000 km before the service is actually due, giving you time to arrange for the service to be carried out. The message is shown on the Trip computer for 10 seconds whenever the car's ignition is switched ON or OFF, until the trip computer is reset. When the service is overdue the message flashes for 10 seconds when the ignition is turned ON or OFF.

- **SERV 1500 km** shows when the car has travelled 500 km since it was built.
- **SERV 10000 km** shows when the car has travelled 9,000 km since it was built.
- **SERV 20000 km** shows when the car has travelled 19,000 km since it was built.
- **SERV 30000 km** shows when the car has travelled 29,000 km since is was built etc.

The trip computer will be reset for you by your Holden Dealer when you take the car in to be serviced. If, for some reason, you wish to reset the reminder message yourself, follow the sequence below:

1. Turn the ignition OFF.
2. Hold down the trip computer ▲ and ▼ buttons together.
3. Turn the ignition ON while still holding down both buttons.
4. After approx. 3 seconds, release both buttons.
5. Press and release the MODE button; the service due screen appears on the display.
6. Press and hold both ▲ and ▼ buttons for approx. 3 seconds until a beep is heard.
7. Release both buttons.
8. Turn ignition OFF.

This message is calculated only by distance. Remember that if you are driving infrequently special servicing may be required, refer Chapter 12.

Notes:

- Two warning lights are linked to the trip computer displays:

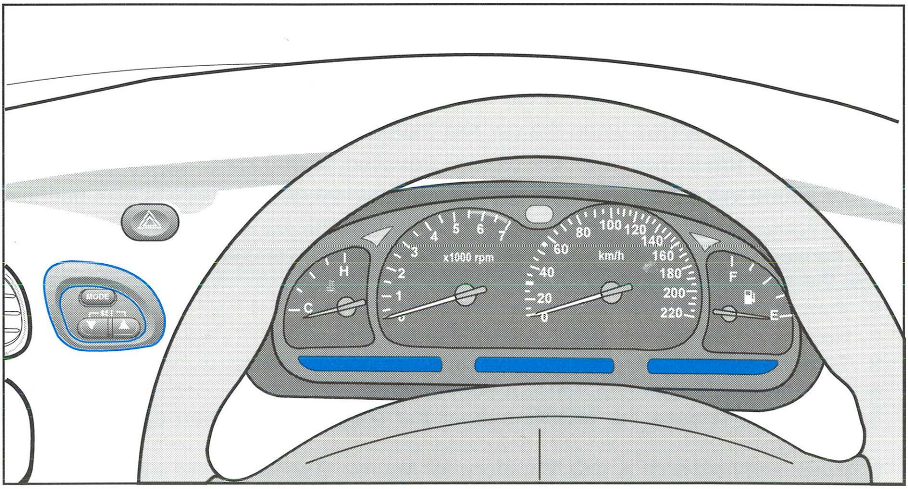
  1) When the fuel tank level first drops below 8 litres (approx.), the DISTANCE TO EMPTY display is automatically shown for 10 seconds, after which the trip computer returns to its previous display.

  2) When the OVERSPEED warning symbol is first shown, the OVERSPEED trip computer display is automatically shown for 10 seconds. This is to show what your pre-selected speed is and allow you to adjust it if required. After 10 seconds, the trip computer returns to its previous display.

- Some of the displays change the units of measurement over time. For example, the TIME TO GO shows 10 minute units above 2 hours to arrival, shows 5 minute units below 2 hours to arrival and shows 1 minute units below 10 minutes to arrival.
- If the **"HOT"** warning is displayed when driving, it indicates that the engine water temperature is dangerously hot. An audible warning chime is designed to bring this to your attention. You should stop the car as soon as it is safe to do so. Refer Chapter 6 for overheating instructions. Note that the message is only displayed for 10 seconds.
- If the "**SERV ERROR**" warning is displayed on the trip computer a fault in the trip computer system is indicated and you should see your Holden Dealer.

TRIP COMPUTER - TRIPLE *WINDOW TYPE*

Two types of trip computers are available. Depending on your luxury level, your car is fitted with a *single* window trip computer or a *triple* window trip computer. Explanation regarding the single window type can be found further back in this chapter.



The buttons for the trip computer are located to the left of the gauges and the triple windows for the trip computer are located directly beneath the gauges.

The basic, more commonly used functions of the trip computer are shown on these two pages. Tap the MODE button to scroll between these three sets of displays.

You will notice that speed related displays are in the left window, distance related displays in the centre and fuel related displays on the right.

The trip computer can be reset when AVG SPEED or TRIP TIME are shown on the left window. Resetting does not affect the ODOMETER, OVERSPEED, DISTANCE TO EMPTY or INST FUEL.

Personal customising is provided in the trip computer for the more technically minded owner. Customising details, as well as additional operating notes, are shown over the page.

AVG SPD 50.1 km/h

Avg speed

Shows the average speed (while the engine is running) since the trip computer was reset.

ODO 000871 km

Odometer

The odometer records kilometres travelled since the car was built.

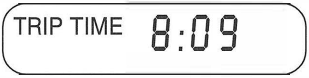
AVG FUEL 9.9 L/100 km

Avg fuel

Shows average fuel used since the trip computer was reset. After resetting, some large numbers may initially be shown, due to the short distance travelled and the high fuel used when accelerating.

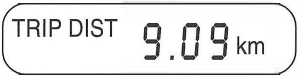
TAP MODE BUTTON

TRIP COMPUTER - TRIPLE *WINDOW TYPE cont.*



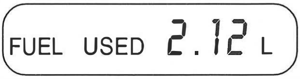
Trip time

Shows the "engine running" time since the trip computer was reset.



Trip distance

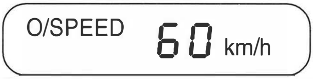
Shows the kilometres travelled from the start of a particular trip. Reset the reading to zero by pressing the ▲ and ▼ buttons together when this window is shown.



Fuel used

Shows the total litres of fuel used since the trip computer was reset.

TAP MODE BUTTON



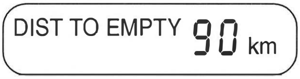
Overspeed

Set the speed you don't want to exceed, e.g., if driving in a 90 km/h zone, set OVERSPEED to 90, by tapping the ▲ or ▼ buttons. When car speed exceeds 90 km/h the OVERSPEED warning light in the instrument panel and a chime warns you that you are speeding. At that time the trip computer automatically shows this display, to make adjustments if required.

OVERSPEED is adjustable in 5 km/h units and works at speeds between 20 km/h and 200 km/h. Tap the ▲ or ▼ buttons or hold a button to scroll quickly to a speed. Briefly press the ▲ and ▼ buttons together to set OVERSPEED to the speed at which the car is currently travelling.

Press and hold both the ▲ and ▼ buttons for at least 2 secs (when this window is shown) to turn OVERSPEED ON or OFF.

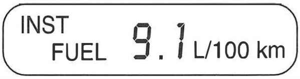
OVERSPEED "presets" can also be chosen, refer over the page.



Distance to empty

DISTANCE TO EMPTY is an estimate of how far your current fuel level will last. It is based on your previous fuel usage and is frequently updated. Therefore, as conditions become suited to more economical driving the DISTANCE TO EMPTY may actually increase, for example from city to highway driving.

In addition, movement of fuel in the tank can cause the reading to fluctuate when the fuel level is low.



Inst fuel

Shows instantaneous fuel usage in litres per 100 km when driving. When speed drops below 10 km/h the usage is shown in litres per hour.

TRIP COMPUTER* - TRIPLE *WINDOW TYPE cont.

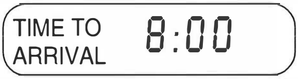
Additional displays

Additional displays can be activated using customise mode, refer over the page. DISTANCE TO ARRIVAL, TIME TO ARRIVAL and REMAINING FUEL are turned on and off as a set, they cannot be individually activated.

When the displays are activated, press the MODE button to scroll through all the Trip Computer displays. There are now 4 sets of displays, instead of 3. The new displays are slotted between the TRIP display and the DISTANCE TO EMPTY display. Customise mode can be used to deactivate the displays, if required.

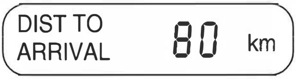
If TIME TO ARRIVAL is turned off using customise mode, it can still be temporarily turned on by the following quick method:

Press MODE button until the TRIP distance is shown, press the ▲ and ▼ buttons together to zero the trip display, then increase the distance up by pressing the ▲ button. However, when the trip distance reaches zero the function is turned off again. Use the customise mode to permanently turn the displays on.



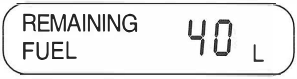
Time to arrival

Shows trip time to arrival in hours and minutes, based on DISTANCE TO ARRIVAL.



Distance to arrival

At the start of a trip estimate your distance to arrival (from maps, road signs etc.). Tap the ▲ or ▼ buttons until the display shows your estimated trip distance. When you drive off the computer constantly updates your time to arrival, based on changing driving speeds. You can use the ▲ or ▼ buttons to adjust the kilometres any time this display is shown.



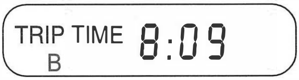
Remaining fuel

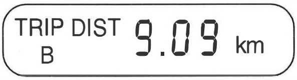
Shows the litres of fuel left in the fuel tank, rounded to the nearest 5 litres.

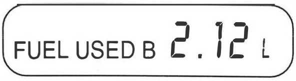
When fuel level is low "LO" is displayed.

Trip B

When the above set of windows are turned on (using the customise mode) and are showing on the display, hold the MODE button down for two seconds. Now, instead of the above displays, the trip computer shows:







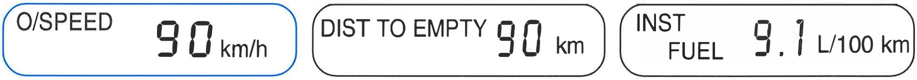
Press the MODE button to view your displays. You now have two different sets of trip displays counting, your original set of trip displays (labelled "A" while "B" is turned on) and a new set of trip displays, labelled "B". This is useful on a long trip, as Trip B can be reset at the beginning of the journey and then locked away (by pressing the MODE button for 2 seconds when "Trip B" is shown). TIME TO ARRIVAL, DISTANCE TO ARRIVAL and REMAINING FUEL are shown on the display, but Trip B is still counting away in the background and the original trip display can be used for short distances during the journey. Trip B can be viewed at any time by pressing the MODE button for 2 seconds when DISTANCE TO ARRIVAL is shown.

TRIP COMPUTER - TRIPLE *WINDOW TYPE cont.*

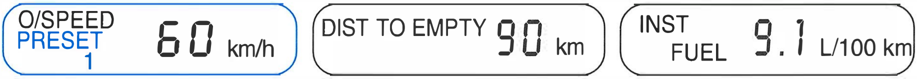
OVERSPEED adjusting

Instead of adjusting O/SPEED up and down in 5 km increments (see previous pages), you can set 4 commonly used speeds, e.g. 60, 80, 100 and 110.

Hold down the MODE button for 2 seconds when the O/SPEED is shown. The display changes from normal O/SPEED to O/SPEED PRESET.



Hold MODE button for 2 seconds



PRESET 1 is the first preset number, with a default setting of 60 km/h.

Tap the ▲ button to see the second PRESET, which has a default setting of 80 km/h, PRESET 3 has a default setting of 100 km/h and PRESET 4 of 110 km/h. Tap the ▲ or ▼ buttons to move between the PRESET numbers.

The O/SPEED PRESET display has now replaced the normal O/SPEED display in your set of displays. Tap the MODE button to scroll through the other displays.

To change the display back to normal O/SPEED, hold down the MODE button for 2 seconds while the O/SPEED PRESET display is shown.

Altering OVERSPEED PRESETS

The default settings of 60, 80, 100 and 110 km/h can be changed for your individual preference.

The car must be standing still when changing an O/SPEED PRESET. To alter, ensure the preset you wish to change is showing, e.g., PRESET 2 80 km/h. Then, briefly press the ▲ and ▼ buttons together. The display starts to flash. Use the ▲ or ▼ button to adjust the setting. When correct, briefly press the ▲ and ▼ buttons together. Each PRESET can be changed in this way.

The PRESETs are automatically arranged in ascending order.

One or more PRESETs can be assigned to "OFF", by reducing the preset down to "0" (OFF). When driving you then only have 3 or less PRESETs to choose from. To turn back on, select the "OFF" PRESET (when the car is standing still) and use the ▲ button to increase the number.

An O/SPEED PRESET must be altered when the car is standing still. If the ▲ and ▼ buttons are briefly pressed while driving, the OVERSPEED setting is changed to the speed at which you are travelling.

If the ▲ and ▼ buttons are pressed together for more than 2 seconds, either while driving or standing still, O/SPEED is turned completely OFF or ON.

TRIP COMPUTER - TRIPLE WINDOW TYPE cont.

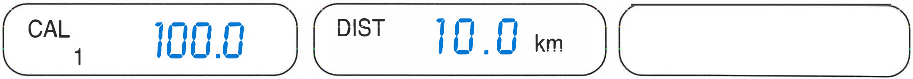
Customise mode

The trip computer uses in its calculations different calibration numbers. These figures are pre-set for the standard car and do not *have* to be adjusted. However, each car does vary due to tyre size, tolerances etc. and, therefore, the facility is provided to adjust each figure for greater accuracy. Also provided in customise mode are different choices about displays.

Customise: how to enter calibration numbers and choices

To enter customise mode, press and hold the MODE button while the ignition is turned from OFF to ON. After entering customise mode, tap the MODE button to view each calibration/choice or alter the settings as described below.

Calibration 1: Distance calibration



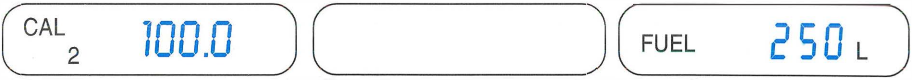
If you wish to check/adjust this, line the car's front wheels against a highway kilometre shield post BEFORE ENTERING CUSTOMISE MODE. Press both the ▲ and ▼ buttons together when TRIP DIST is showing in the centre window (to zero the TRIP DIST). Drive off to another shield post (between 10 km and 500 km) and stop with the front wheels lined up again. Note the real distance between the shield posts and the distance on the TRIP DIST display. If different, enter customise mode. The TRIP DIST is shown in the centre window. Press the ▲ or ▼ buttons to adjust the centre display to show the real distance indicated by the shield posts.

Note that the left display (the distance calibration %) automatically adjusts to the centre display. The default distance calibration is 100.0%. The maximum it can be adjusted to is 120.0%, the minimum is 80%.

Note that altering the distance calibration does not affect the odometer.

Press the MODE button to go to the next calibration number.

Calibration 2: Fuel flow calibration number



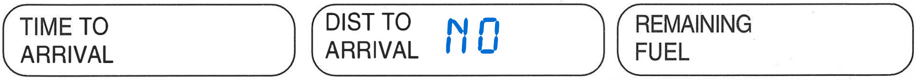
If you wish to check/adjust this, work out the following BEFORE ENTERING CUSTOMISE MODE. Press both the ▲ and ▼ buttons together when FUEL USED is showing in the right hand window (to zero the FUEL USED). Then, for at least five consecutive fuel fills, record the total litres added (but no more than 500 litres), according to the service station fuel bowser. If this is different to the FUEL USED reading, enter customise mode and tap the MODE button once, to show "CAL 2". The FUEL USED is shown on the right hand display. Press the ▲ or ▼ buttons to adjust the right hand display to show the actual total fuel used according to the service station fuel bowser.

Note that the left display (the fuel flow calibration %) automatically adjusts to the right display. The default fuel calibration is 100.0%. The maximum it can be adjusted to is 120.0%, the minimum is 80%.

Press the MODE button to go to the next choice.

TRIP COMPUTER - TRIPLE *WINDOW TYPE cont.*

Choice: Skip DISTANCE TO ARRIVAL

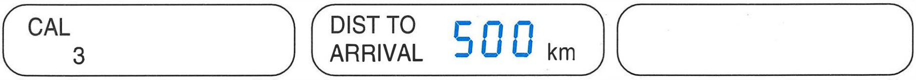


This is the choice to activate an additional set of displays: TIME TO ARRIVAL, DISTANCE TO ARRIVAL and REMAINING FUEL. These displays are explained on the previous pages.

Press ▲ or ▼ button to select YES or NO.

Press the MODE button to go to the next calibration number.

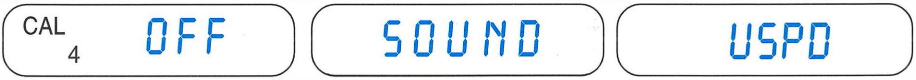
Calibration 3: Adjust DISTANCE TO ARRIVAL default setting



The DISTANCE TO ARRIVAL can be reset (when not in customise mode) by pressing the ▲ and ▼ buttons together. The distance resets to 500 km, which is the default setting. When in customise mode, the default setting can be altered up or down by pressing ▲ or ▼ buttons, helpful to quickly recall a regularly travelled trip.

Press the MODE button to go to the next choice.

Choice: Underspeed chime



OVERSPEED provides a chime when your travelling speed exceeds OVERSPEED, and another chime when travelling speed again drops below OVERSPEED chosen speed. Customise mode gives a choice about turning the second chime, the "underspeed" chime off or on. Press ▲ or ▼ button to turn underspeed chime OFF or ON.

Then press MODE button to end Customise mode.

Customise mode ends automatically if car speed exceeds 10 km/h or if the ignition is turned off and on.

TRIP COMPUTER - TRIPLE *WINDOW TYPE cont.*

Service Due

A service reminder message is built into the trip computer.
The reminder message first appears 1,000 km before the service is actually due, giving you time to arrange for the service to be carried out. The message is shown on the Trip computer for 10 seconds whenever the car's ignition is switched ON or OFF, until the trip computer is reset. When the service is overdue, the message flashes for 10 seconds when the ignition is turned ON or OFF.

- **SERV 1500 km** shows when the car has travelled 500 km since it was built.
- **SERV 10000 km** shows when the car has travelled 9,000 km since it was built.
- **SERV 20000 km** shows when the car has travelled 19,000 km since it was built.
- **SERV 30000 km** shows when the car has travelled 29,000 km since is was built etc.

The trip computer will be reset for you by your Holden Dealer when you take the car in to be serviced. If, for some reason, you wish to reset the reminder message yourself, follow the sequence below:

1. Turn the ignition OFF.
2. Hold down the trip computer ▲ and ▼ buttons together.
3. Turn the ignition ON while still holding down both buttons.
4. After approx. 3 seconds, release both buttons.
5. Press and release the MODE button; the service due screen appears on the display.
6. Press and hold both ▲ and ▼ buttons for approx. 3 seconds until a beep is heard.
7. Release both buttons.
8. Turn ignition OFF.

This message is calculated only by distance. Remember that if you are driving infrequently, special servicing may be required, refer Chapter 12.

Trip computer notes:

- If the wrong buttons are accidentally pressed, causing the window to show other than normal, turn the ignition OFF then ON again when the car is standing still.
- Two warning lights are linked to the trip computer displays:
  1) When the fuel tank level first drops below 8 litres (approx.), the DISTANCE TO EMPTY display is automatically shown for 10 seconds, after which the trip computer returns to its previous display.
  2) When the OVERSPEED warning symbol is first shown, the OVERSPEED trip computer display is automatically shown for 10 seconds. This is to show what your pre-selected speed is and allow you to adjust it if required. After 10 seconds, the trip computer returns to its previous display.
- Some displays change the units of measurement over time. For example, the TIME TO ARRIVAL shows 10 minute units above 2 hours to arrival, shows 5 minute units below 2 hours to arrival and shows 1 minute units below 10 minutes to arrival.
- Note that the flashing light above the switches for the trip computer is for the security system, refer Chapter 2 "Locks".
- Higher luxury level cars have a personal identity key system (fully explained in Chapter 2) which remembers different settings used by different keys. If your car is fitted with this system, the trip computer remembers your last selected settings. When the ignition is turned on with your key, your last set of displays and overspeed settings are shown.

☒ This symbol, shown in the left window, indicates a fault in the trip computer.

WIPERS and WASHERS

The lever on the left of the steering wheel column controls the front and rear wipers and washers, which operate when the ignition is turned to either ON or ACCESSORIES.

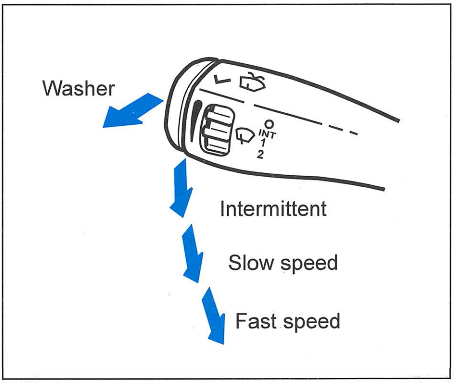
Front wipers and washers

Never operate the wipers on dry glass, as this will damage the rubber and scratch the glass. To obtain a spray of fluid, pull the lever towards you and hold as long as required. This automatically turns on the wipers for a short time, if not already operating.

Push the lever down to turn on the wipers. If just held gently down the wipers sweep 'intermittently': once every few seconds. The wipers sweep intermittently as long as the lever is held.

Pushing the lever further down, to the first 'stop' switches the wipers to the intermittent position and allows the hand to be removed from the lever.

Pushing the lever to the second 'stop' turns the wipers to slow speed. Pushing the lever further down, to the third stop, turns the wipers to high speed.

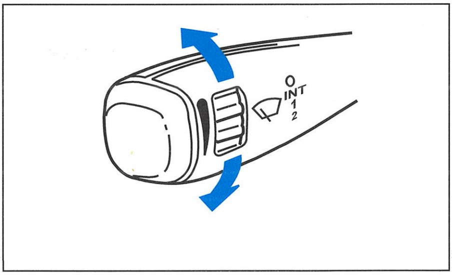


Variable intermittent (if fitted)

The frequency of intermittent wipe can be varied by moving the dial in the lever. Rotate up for a more frequent wipe, or down for a less frequent wipe.

In addition, the intermittent wipe speed is *road speed dependent*, which means that as the car speeds up, so do the wipers.

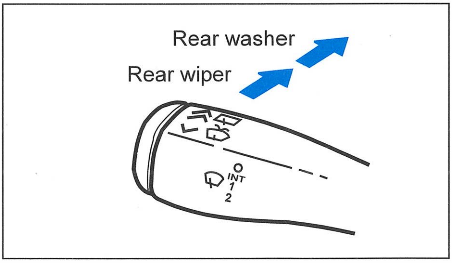
Refer Chapter 7 when topping up washer fluid.



Rear wiper and washer (wagon)

Push the lever away from you, to the first 'stop', to turn on the rear wiper. To turn on the rear washer, push the lever further and hold as long as required.

The rear wiper usually has a delayed sweep. However, on wagons built with an automatic transmission the rear wiper changes to a continuous sweep when reverse gear is selected or the front wipers are switched ON.



LIGHTS

OFF

All lights off

Park lights

Turns on the park, tail, rear licence and instrument panel lights.

Dimmer - instrument lighting

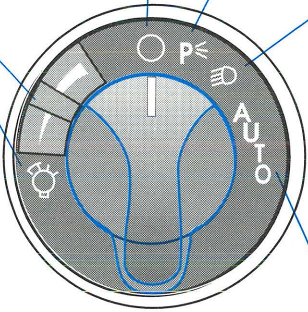
The instruments are automatically illuminated when the park lights are switched on.

Move the tab up to select the *bright* position, or down for *dim.*

On higher luxury models the lighting can be adjusted anywhere between *off* and *bright* by holding the tab in the bright or dim position until the desired level is reached.

Head lights

Turns on the headlights (in addition to all the park lights).



Auto (if fitted)

Headlights and park lights automatically switch off and on, as required. High/low beam selection must still be manually controlled.

The light sensor is in the centre of the dash. Be careful not to cover up the sensor, as this may affect operation and it should occasionally be wiped clean.

LIGHTS cont.

Automatic headlights off

Leaving the head/park lights ON when the engine is not running will eventually flatten the battery. To prevent this, the park/head lights temporarily switch OFF when the ignition has been switched from ON to OFF and the driver's door is opened....... the car senses that the driver has forgotten to switch off the lights. The lights stay OFF until the ignition is again switched ON.

On higher luxury models, the headlights can be made to automatically switch OFF *after* you have locked the car and walked away, useful for illuminating a path. To set/adjust the time delay from when the driver's door is opened to when the lights automatically switch off:

- with park lights ON, ignition switched to ON and driver's door closed,
- hold the tab for the instrument lighting in the dim position,
- switch ignition to **ACC**,
- open driver's door (this starts the delay period),
- wait desired delay time (maximum of 3 minutes),
- release the tab for the instrument lighting (park lights go out and time delay is set).

If you wish to have the lights ON when leaving the car, wait until they have been automatically switched OFF, then turn the light switch first to OFF, then to PARK or HEADLIGHTS.

Headlights on when approaching the car (if fitted)

This feature is designed to provide additional security, when returning to the car at night. When the UNLOCK button on the ignition key is used, the car's exterior lights will come on for 30 seconds or until the car is relocked.

However, the lights will only turn on to the position that the headlight switch is in when the car was left, i.e. if the switch is in AUTO or HEAD LIGHTS, the head lights will come on, if the switch is in PARK LIGHTS, the park lights will come on, if the switch is OFF no lights will come on. This feature can be switched off by your Holden Dealer if not required.

Headlights and dimming instruments note

When the headlights are switched on the instruments are automatically illuminated. Once illuminated the driver has the ability to adjust their brightness, see previous page. Some illuminated areas of the car have been linked to the brightness control (trip computer, headlight switch, radio etc.). This means that the interior ambience can be adjusted to your preference.

When the headlights are turned OFF then ON the brightness level reverts to the last adjusted setting.

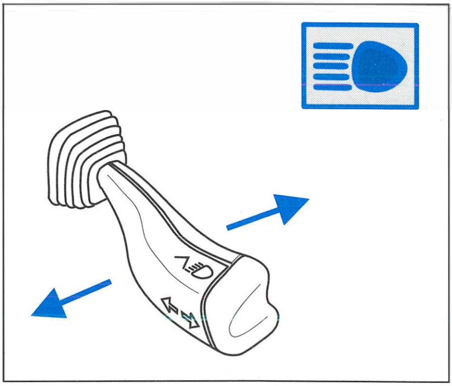
Personal Identity Keys on higher luxury levels: When the key is inserted in the ignition and turned to ON the system identifies the key and sets the brightness and headlight time delay to the last adjustments used for that key. Also refer Chapter 2.

Battery saver - 1 hour timer

Usage of lights is also affected by the 1 hour Battery Saver, refer last page of Chapter 3.

LIGHTS cont.

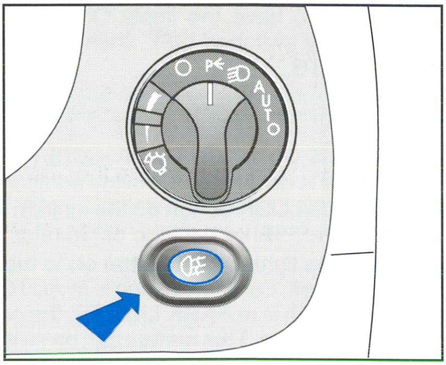
High/low beam



High/low beam is controlled by the lever on the right side of the steering wheel column. With the headlights on, push the lever away from you, until you feel a click, then release. The headlights will change from low to high beam. When the high beams are in use, a blue symbol on the instrument panel is displayed.

It is also possible to flash the high beams for signalling purposes (even if the headlights and/or ignition are switched off) by pulling the lever towards you; the lights remain in high-beam as long as the lever is held.

Fog lights (if fitted)



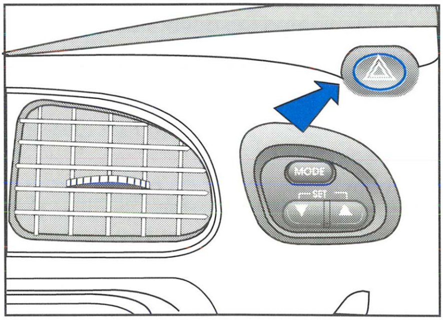
Push the switch to turn the fog lights off or on when the light switch is turned to parkers or headlights. The light in the instrument panel glows when the fog lights are working.

Fog lights are designed to provide a different illumination of the road to the usual headlight beam. Depending on the density of the fog, different combination of lights will improve vision. For-instance, in very heavy fog, vision may be improved by turning the headlights off, and just having the parkers and fog lights on.

Driving speed should be reduced in fog.

It is recommended that you check your State's laws regarding use of fog lights when driving.

Hazard warning flasher



Press the switch to turn the hazard warning flasher on and off. The hazard warning flasher works regardless of the ignition position.

When turned on, all turn signals flash continuously.

Use the hazard warning flasher to warn other drivers any time your car becomes a traffic hazard, day or night.

Use of the hazard warning flashers while the car is moving is illegal in some States or Countries.

RADIO, CLOCK

Radio, cassette (if fitted), clock and CD

Detailed information on the operation of the radio, CD and cassette (if fitted) is provided in the glovebox.

Operating information for adjusting time, adjusting the antenna height, entering the Personal Identification Number and *remote* control of the radio via the steering wheel is provided on these pages.

Important cassette care note

After repeated playing, residue from the tape surface and dust from surroundings builds up on the tape head and tape handling surfaces. This is first noticed as lack of treble and a muffled sound.

To assist good quality sound, reduce dropout and trouble free operation, a good quality 'Wet type' cassette head cleaning tape should be used every month or two, depending on the amount of use.

Clock - to adjust time

Time or radio frequency can be selected with the "TIME" button. When the time is displayed and the radio is playing, the time can be set as follows:

To advance hours: hold down the "TIME" button and press the " ◂◂TUNE" button.

To advance minutes: hold down the "TIME" button and press the "TUNE▸▸" button.

Radio P.I.N. (Personal Identification Number)

Your P.I.N. must be entered if the battery is disconnected. The P.I.N. is shown on the security card that was originally in the glovebox of the new car. Please keep the card in a safe but accessible place (not in your car), as this safety feature is provided as a theft deterrent.

To enter the P.I.N.:

- turn ignition to accessories and turn radio on ("1" or "CdE 1" appears),
- press the radio buttons in your P.I.N. order,
- the radio will shortly begin to play.

If an incorrect P.I.N. is entered the number "2" or "CdE 2" appears on the display. Following three incorrect P.I.N.s the display shows " - - - ", and the radio must remain connected to power for approx. one hour before the correct P.I.N. can be entered.

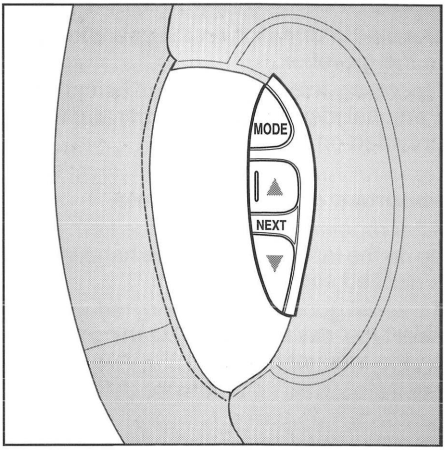
Therefore, if your car repair requires battery disconnection you may wish to provide the servicing dealer with your P.I.N.

If the P.I.N. number is lost, contact your Holden Dealer. He will require proof of ownership and the Vehicle Identification Number shown on the inside front cover of this handbook. There may be a nominal charge for this service.

AUDIO STEERING WHEEL BUTTONS

Left side

Pressing the MODE button alternates between different audio modes: radio FM1, radio FM2, radio AM, cassette (if fitted) and CD.



When the radio is playing:
Favourite radio stations can be assigned a "preset" number so that they can be quickly recalled (see radio supplement in glovebox).

When the radio is playing, pressing the NEXT ▲ button switches the radio up to the next preset station, i.e., radio station number 3 is playing; NEXT ▲ is pressed; radio station number 4 starts playing. Likewise, NEXT ▼ switches the radio down a preset station.

When a CD is playing:
Tapping the NEXT ▲ or ▼ buttons switches between CD tracks.

(Calais only) Pressing and holding the NEXT ▲ and ▼ buttons switches between the different CDs.

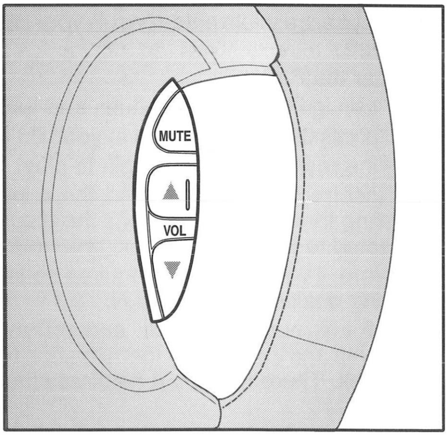
When a cassette is playing:
(Calais only) Pressing the NEXT ▲ button moves the player to the start of the next song (likewise for the NEXT ▼ button).

Right side

The VOL ▲ or ▼ buttons turn the volume up or down. Either hold down the button for as long as required, or tap the button, for small changes in volume.

The MUTE button switches the volume down or up by 20 decibels. Therefore, sound is only heard If the radio was very loud before muting.

In addition, pressing volume ▲ immediately *un*-MUTES the radio.



ANTENNA

The antenna shaft should be regularly cleaned with a soft cloth, water and a mild detergent. This not only helps the antenna to retract but also aids radio reception.

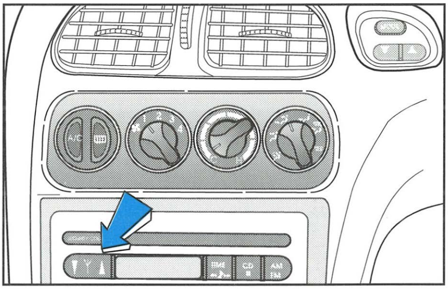
In addition to the normal external antenna, higher luxury levels have a 'diversity' antenna, which improves FM reception. The diversity antenna is incorporated in the rear window and can be noticed as lines in the glass, above the demister lines.

The best reception is always gained when the antenna is fully extended. However, to guard against breaking or bending the antenna, it may need to be retracted (for overhanging trees, car wash etc.). Different antennas are fitted to different luxury levels.

Electric antenna - full up/full down type

When the radio is switched ON the antenna extends to full height; when the radio is switched OFF, the antenna fully retracts. Therefore, if you have need to retract the antenna (clearance for overhanging bushes etc.) while driving, turn off the radio by pressing the ON/OFF switch until clear of the obstacle.

Electric antenna - height adjustable type



When the radio is switched ON the antenna height can be adjusted by pressing the switches in the radio, as shown.

Therefore, if you need to lower the antenna (clearance for overhanging bushes etc.) while driving, press the down arrow to lower the antenna. When clear of the obstacle the antenna should again be fully extended so as to gain the best radio reception.

Personal Identity Keys on higher luxury levels: When the key is inserted in the ignition and turned to ON the system identifies the key and sets the antenna height to the last adjustment used for that key. Also refer Chapter 2.

GLOVEBOX, PHONE

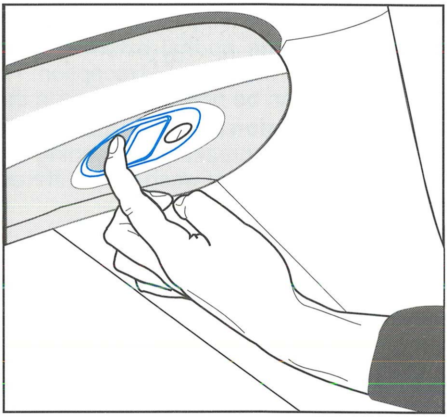
Glovebox

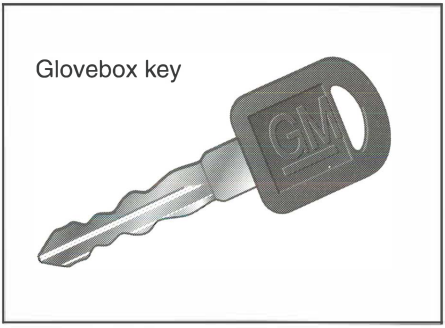
A glovebox is provided on the passenger side of the instrument panel.

A specific key is provided solely to lock/ unlock the glovebox. For security, the master key is designed not to operate the glovebox lock. Refer page 2-2 for more information on keys.

To lock, insert the glovebox key, turn clockwise and then withdraw. To unlock, insert the glovebox key and rotate anti-clockwise.

To open, pull the left side of the catch towards you. To close, push lid firmly back into place.

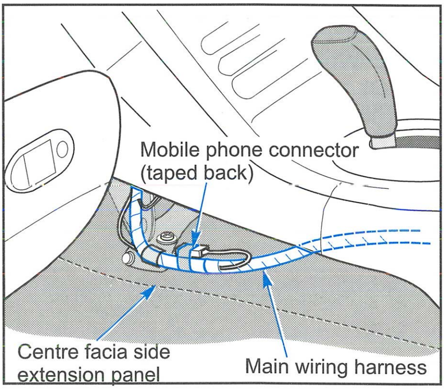



Glovebox key
GM

Mobile phone connection

If your model car is fitted with a telephone the operating information is provided in the glovebox.

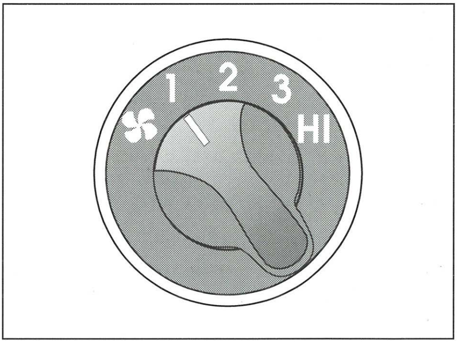
A power connection for fitting a telephone is provided for all models, taped under the centre console, on the front, passenger's side.


Mobile phone connector
(taped back)
Centre facia side
extension panel
Main wiring harness

STANDARD HEATER, AIR COND. (if fitted)

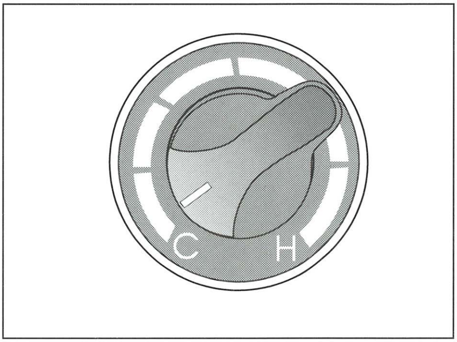
Fan dial

The fan dial provides speed control of the blower fan in all Mode dial positions.



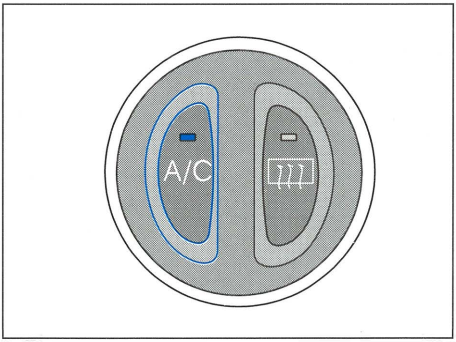
Temperature dial

The temperature dial adjusts the temperature of the air entering the passenger compartment in all Mode dial positions.



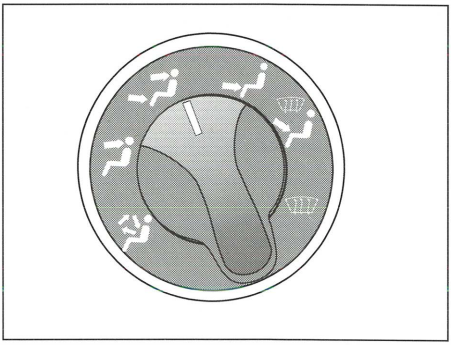
Air conditioning (if fitted)

- The air conditioning is turned on when the light in the switch is illuminated. Repress the button to switch OFF.
- The fan must be set to 1 or above before the air conditioning will work.
- When the air conditioner is switched on and the Mode dial is turned to either Bi-level or Face, air is also delivered from the rear seat vents.
- The air conditioner operates more effectively when all the windows are closed.



STANDARD HEATER, AIR COND. (if fitted) cont.

Mode dial



RE-CIRCULATE. Interior air is re-circulated and directed back through the face level vents. Refer operating notes on following page.

FACE. Air comes from the face level vents and the rear seat vents.

BI-LEVEL. Cooler air comes from the face vents and warmer air from the floor vents, provided the temperature lever is moved away from extreme cold or extreme hot. This position can be used for most winter driving.

FLOOR. Air comes from the floor vents.

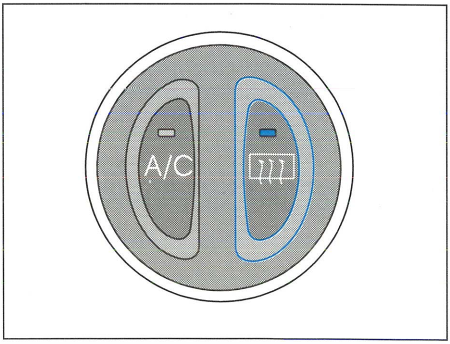
FLOOR AND FRONT WINDOW DEMIST Air comes from the floor and demist vents.

FRONT WINDOW DEMIST. Air comes from the demist vents.

Rear window demist

Press the switch to turn the demister on and off. The light in the switch indicates when the demister is working.

To avoid unnecessary electrical consumption the demister automatically switches off after 15 minutes or if the ignition is switched off.



STANDARD HEATER, AIR COND. notes

Unsealed roads

When following another car on dusty roads, or to prevent exhaust fumes or odours entering your car, select the re-circulate position on the mode dial, make sure windows are closed and switch on air conditioning (if fitted).

When driving on un-sealed roads but where the dust is not airborne, use the face or bi-level setting of the Mode dial (with the windows closed) and the fan preferably on a high speed so that positive air pressure in the car will prevent any dust entry.

Re-circulate re-uses interior air and is therefore not recommended for long periods of time.

Air conditioning (if fitted)

Hot weather. For a "quick cool down" when first entering the car on a hot day, switch on the air conditioner, turn the Mode dial to re-circulate, turn the temperature control dial to full cold and turn the fan to a high speed. Also, open the windows to allow the hot air to escape. After a minute or two, close the windows, as the air conditioning works more effectively with the windows up.

It is recommended selecting "face" mode and "outside air" when the interior cools down (10 to 20 minutes) to achieve and maintain best comfort conditions during extended driving.

The coolest temperature, however, is achieved when re-circulate is selected. This can be used in slow city traffic or when the car is stationary in very hot weather. Occasionally select face or bi-level to allow outside air to enter the car.

Performance/fuel economy. The air conditioner uses power from the car's engine. Therefore, you will notice a small decrease in engine power, and a slight increase in fuel consumption when the air conditioner is in use. When driving at high speeds the air conditioning compressor may switch off so that full engine power is available.

The system is protected by switches that guard against abnormal loads and loss of refrigerant. The compressor may switch off temporarily. Have the system checked by a Holden Dealer if this occurs.

Important. Once every two weeks, with the engine running, switch the air conditioner on for 5 to 10 minutes (even in Winter) to lubricate seals.

Hissing. Occasionally a slight hissing sound may be heard for a short time when the air conditioner switches off and pressure in the system equalises. This is normal.

Demisting

If the side windows or windscreen fog up on a cold day, switch on the air conditioner, turn the fan switch to a high speed, turn the Mode dial to demist or bi-level and select a warm setting with the temperature control dial. This circulates warm, dehumidified air throughout the car, defogging the windows. Note that the air conditioner not only reduces temperature but also reduces humidity and dust.

Automatic transmission

If your car is stopped for long periods in hot weather with the engine running and the air conditioner operating, select N or P with the transmission T-bar.

Cigarette smoke

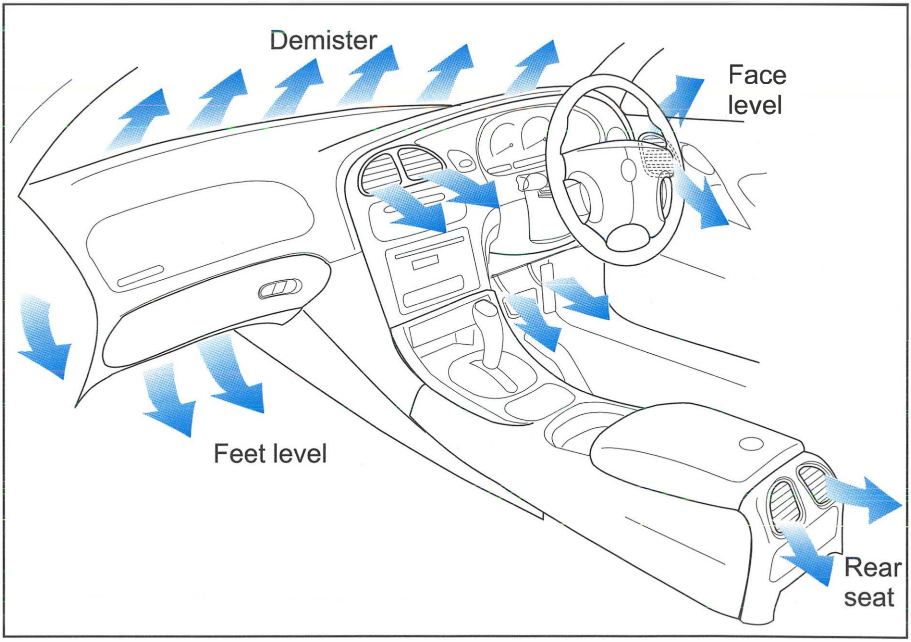
If occupants are smoking, it is recommended that the "re-circulate" position NOT be used.

VENTILATING SYSTEM

The car features a flow-through ventilation system for your comfort. Under reasonable conditions, it shouldn't be necessary to open the windows at any time. Outside air (except when re-circulate is selected) is drawn into the car through the opening between the bonnet and the windscreen. Do not allow this grille to become clogged with debris, such as leaves or snow. Any leaves should be removed each time you wash your car (recommended weekly).

Vents

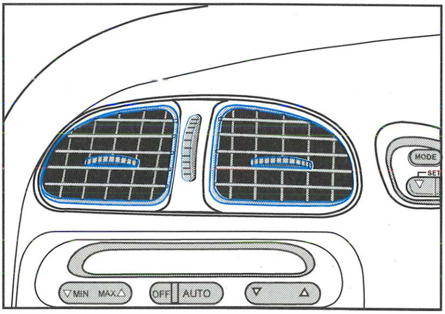
The air may be directed to different types of vents.



The face and rear seat vents have adjustable vanes which may be swivelled up/down and left/right to allow directional control of air flow.

These vents have shut off doors which can also be used to adjust the air volume to suit individual comfort. For example, air flow at the centre vents can be reduced to enhance air flow at the rear seat vents.

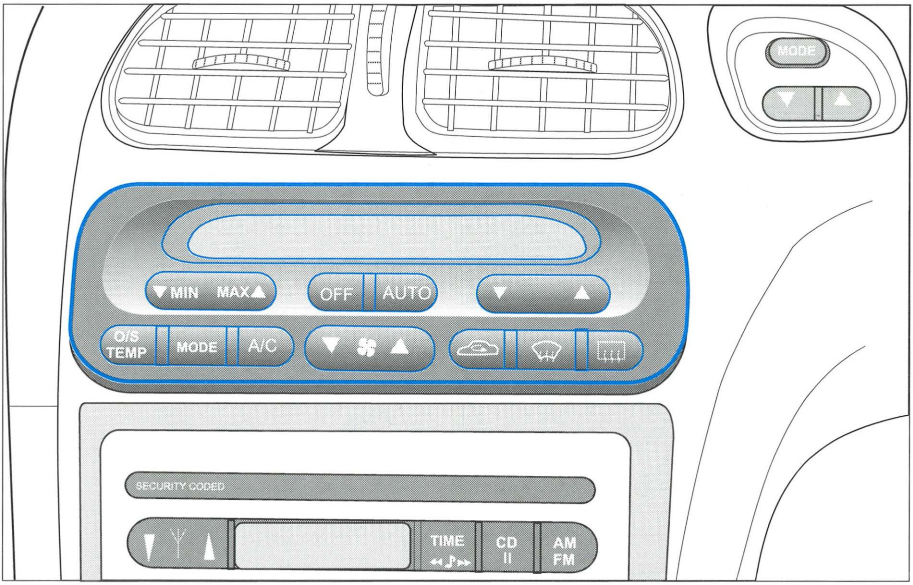
The feet level and demister vents are fixed, as these direct air to the windscreen, feet and side windows in the best possible way.



CLIMATE CONTROL (if fitted)

The Climate Control panel is located in the centre of the dash. It is designed to maintain the interior of your car at your desired temperature.

There are two types of Climate Control panels: single zone and dual zone. The only difference being that the dual zone type (provided on higher luxury level cars) gives provision for the right and left sides of the car to be maintained at different temperatures.



Automatic operation

- Start the engine.
- Press AUTO if the light in the AUTO button is not glowing green.
- Use the red (warmer) or blue (cooler) arrows to adjust the temperature read-out. Try an initial setting between 22°C and 24°C.

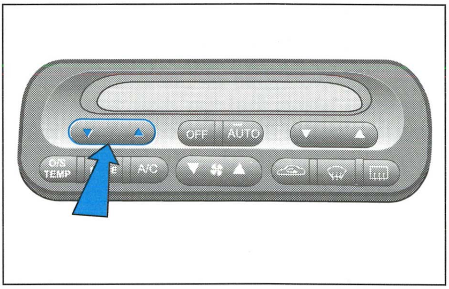
  With dual zone types use the left set of arrows to select the temperature required for the passenger and the right set of arrows to select the temperature for the driver.
- Allow system to stabilise for a few minutes.
- You may need to adjust the angle of the air vents to your personal requirements perhaps with the air vents pointing directly at your body or face for initial cooling, and then pointed away for a more general effect, once you have cooled down.
- The setting does not change between the ignition being turned OFF or ON (except if extreme hot or cold is selected). Therefore, you need only change the setting when you wish to alter your comfort level.

CLIMATE CONTROL (if fitted) cont.

Dual zone type (if fitted)

'Dual zone' (provided on higher luxury level cars) allows for the right and left sides of the car to be maintained at different temperatures.

The left and right sides can be set to different temperatures or can be *linked* to operate identically, i.e., the passengers side will mirror whatever the driver's side is changed to.



To link:
- Press and hold AUTO button for at least 2 seconds. Both displays blink to indicate linking has happened.
- Linking automatically happens if the passenger's and driver's sides are set to the same temperature when the ignition is turned ON.

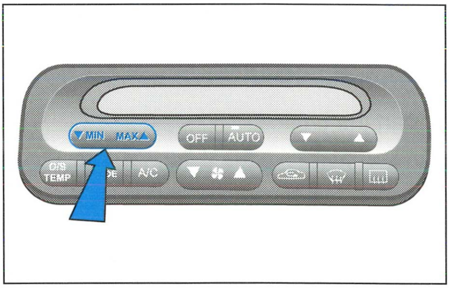
To unlink:
- Press either of the *passenger's* temperature switches.

Single zone type (if fitted)

'Single zone' maintains the interior of the car at the one selected temperature.

On single zone types, pressing MAX COLD moves the temperature to the coldest end of the scale. Subsequently pressing a MAX COLD button moves the temperature back to where it was.

MAX HOT operates in the same way.



Note that the system must be ON (display showing) to make any adjustments.

CLIMATE CONTROL (if fitted) cont.

O/S TEMP Tap this button to alternate the display between temperature outside the car and normal display.

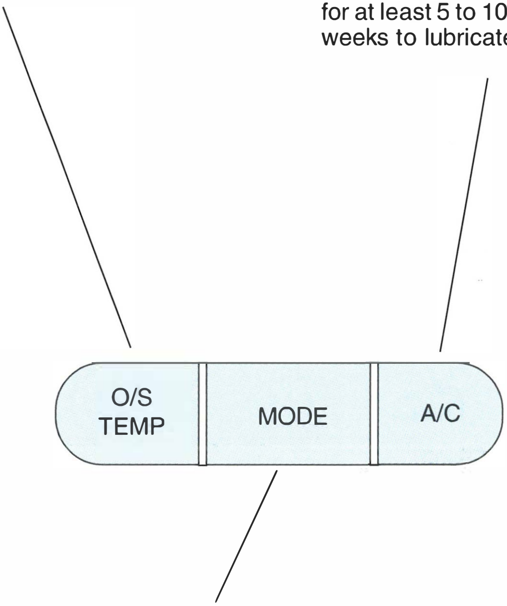
Pressing other buttons to adjust the climate control will also change the display from showing O/S temp to showing the normal display.

Pressing O/S TEMP does not take the system out of automatic mode.

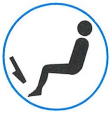
A/C Switches air conditioning between A/C and OFF.

To conserve fuel, you may wish to switch off the air conditioning in cold weather. The climate control maintains automatic control of all other functions but does not turn on the air conditioning, even if cabin temperature gets too high.

When "A/C" is switched on, the air conditioning operates as required, removing moisture and heat from the air. Air conditioning should be switched on for at least 5 to 10 minutes once every 2 weeks to lubricate seals.

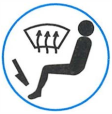


MODE Tap this button to switch between feet, demist and feet, face and feet and face modes.



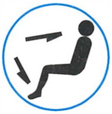
Feet
Air is directed to the feet.

→



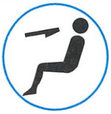
Demist and feet
Air is directed to the feet and demist outlets.

→



Face and feet
Cooler air is directed to the face and rear vents and warmer air is directed to the front feet.

→



Face
Air is directed to the face and rear vents.

CLIMATE CONTROL (if fitted) cont.

RE-CIRCULATION Switches air intake to re-circulated air. **Re-circulate re-uses interior air and is therefore not recommended for long periods of time**.

Re-circulate position should NOT be used if occupants are smoking.

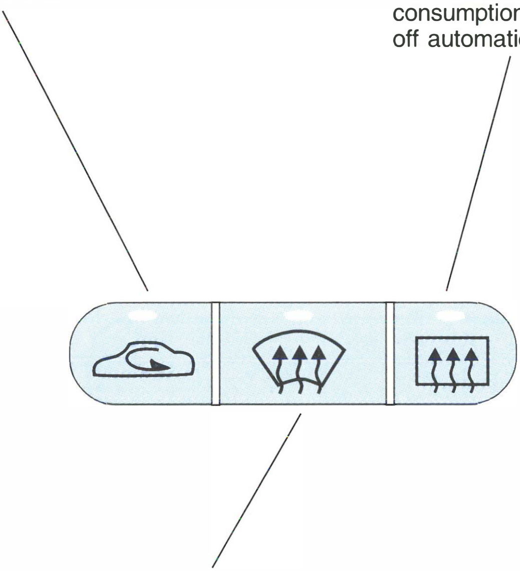
Re-circulation automatically switches off after 40 minutes, or it can be manually turned off by re-pressing the switch.

The light in the switch glows when re-circulation is selected.

REAR WINDOW DEMIST Press this button to turn the rear window demister on and off.

The light in the switch glows when demist is selected.

To avoid unnecessary electrical consumption, the demister switches off automatically.



FRONT WINDOW DEMIST Climate control cannot determine demist requirements. Therefore, tap this button for demisting the windscreen and side windows. The system changes the outlets to demist and switches ON air conditioning.

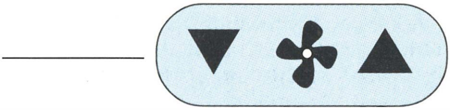
The light in the switch glows when demist is selected.

Re-press the button to switch OFF.

CLIMATE CONTROL (if fitted) cont.

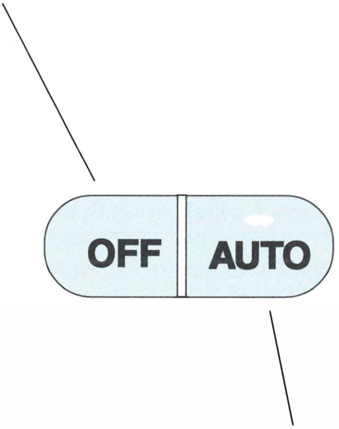
FAN Press ▲ or ▼ on the fan switch to increase or decrease the fan speed. Five fan speeds are available. When the engine is not running the fan speed is limited to conserve the battery.

When the fan is operating automatically, the graphics of the fan blades are clear; when the fan has been adjusted manually the fan blades will fill according to the fan speed.



OFF Switches the system OFF and ON.

When OFF, the fan and air conditioning are switched off but the system still tries to control the cabin temperature and modes.



AUTO Pressing this button switches the system to full automatic control (light in the switch glows green).

Manual override of any controls can impede the system maintaining the set temperature. It is designed to operate with minimum manual adjustment. The light in the switch goes out when *not* in full auto mode.

Allow the system to stabilise before changing comfort settings.

CLIMATE CONTROL NOTES (if fitted) cont.

Ignition keys

Cars fitted with 'priority key locking' systems (refer chapter 2 "Locks") have the ability to remember individual adjustments for different keys.

When the key is inserted in the ignition and turned to ON the system identifies the key and sets the climate control to the last adjustments used for that key.

Adjusting the temperature

When the system has stabilised, and you wish to adjust the setting, it is recommended that the adjustment be made one tap at a time (each tap is one degree) until you are comfortable. Your comfort setting depends on clothing, your acclimatisation, and the angle at which you have directed the vents.

The system can be set anywhere between 17°C (coolest) and 30°C (warmest). Pressing the red arrow when 30°C is already showing causes the display to show "H" (hottest); pressing the blue arrow when 17°C is already showing causes the display to show "C" (coolest).

What the system does

In automatic operation the system always responds quickly to cooling/heating requirements. It is not necessary to set a cooler/hotter temperature than required to ensure fast cooling/heating.

The system should be left on automatic operation, as it can then:

- turn air conditioning on and off,
- vary the temperature of the air entering the cabin,
- re-circulate interior air or take air in from outside the car,
- vary fan speed,
- select the vents through which the air is delivered.

For example, on a cold morning, air may be directed to the windscreen, then as the engine warms up warm air is directed to the feet vents, then later still the system changes to bi-level, the fan slows down and changes to face and foot vents.

You may need to manually adjust the angle of the vents at various times, for instance to direct cool air onto your body on hot days, or past your body when the temperature is mild.

Quick cool down

To aid the climate control when first entering the car on a hot day, open the windows to allow the hot air to escape. After a minute or two, close the windows to allow the system to work more effectively.

Engine idling

If your car is stopped for long periods in hot weather with the engine running and the air conditioner operating, select N (neutral) or P (park).

CLIMATE CONTROL NOTES (if fitted) cont.

Unsealed roads (prevention of dust entry)

When following another car on unsealed roads (and the dust is airborne) it is recommended that re-circulation be selected. However, if the dust is not airborne it is recommended that the setting be on outside air (re-circulation off) and that the fan be on a high speed. This builds up positive air pressure to prevent dust entry. Ensure in both cases that all windows are closed.

Something wrong?

This symbol shows on the display when there is a fault in the system. You should see your Holden Dealer, who has the necessary equipment to diagnose the system.

X

Sensors

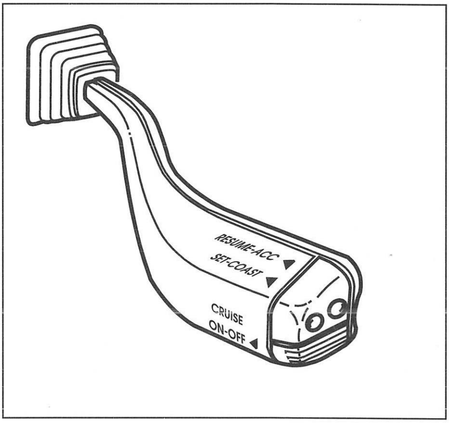
The climate control uses different sensors to maintain your desired temperature.

One sensor, the sunlight sensor, is fixed to the top of the dash board and can be seen as a small rectangle in the centre. It is therefore important that the sensor is not covered or that there are no metal objects close by, as this may block the input. Occasionally the sensor should be cleaned.

Another sensor, the outside temperature sensor, is located under the front of the car and relies on air moving across the sensor. You may notice a difference between the temperature shown on your climate control and the temperature shown on roadside temperature displays. This is due to the car's sensor being closer to the road, which radiates heat.

Another sensor is the in-car sensor, which is located in the dash (refer page 1-3) and measures the temperature inside the car. It is important not to cover the sensor with stickers.

CRUISE CONTROL (if fitted)



The cruise control maintains your car's speed without you having your foot on the accelerator pedal.

The cruise control lever is on the right side of the steering column. The lever has two switches.

The ON-OFF/CANCEL switch is at the *bottom* of the lever and is activated by pushing in towards the direction of the steering column.

The top part of the switch is used to adjust speed. It is a two part switch which can be *rocked* either towards or away from you.

Note the raised dimple when the adjustment switch is rocked away from you. This is the RESUME-ACC position, which is used to resume last set speed and to increase speed.

Also note the depression in the adjustment switch when it is rocked towards you. This is the SET-COAST position, which is used to set initial speed and to decrease speed.

TO SET INITIAL SPEED:

1) Turn on the ignition.

2) Press the ON-OFF/CANCEL switch. CRUISE is displayed on the instrument panel.

CRUISE

3) Press the accelerator pedal until travelling at your desired speed (must be above 40 km/h) and then momentarily rock the adjustment switch towards you, to the SET-COAST position.

   Note the ACTIVE symbol next to the CRUISE symbol on the instrument panel is now showing.

CRUISE ACTIVE

4) You may now release both the accelerator pedal and the switch, as the cruise control is now maintaining the speed.

CRUISE CONTROL (if fitted) cont.

TO ADJUST YOUR SET SPEED you may either:

- Rock the adjustment switch towards you to the SET-COAST position until the car slows down to the desired speed, then release.

  or

- Rock the adjustment switch away from you to the RESUME-ACC position until the car accelerates up to the desired speed, then release.

Minor changes in speed (2 km/h) can be achieved by *momentarily* rocking the adjustment switch; either away from you or towards you. When slowing speed, remember that the cruise control is not designed to operate under 40 km/h.

TO PAUSE THE CRUISE CONTROL:

Press the brake pedal or press the clutch pedal (if the car has a manual transmission) or press the ON-OFF/CANCEL switch *once*.

This deactivates the cruise control (the ACTIVE symbol turns off) but retains the speed in its memory. To regain the memory speed you have only to momentarily rock the adjustment switch to the RESUME-ACC position, provided you are travelling over 40 km/h. Holding in the RESUME-ACC position for longer than one second causes the car to accelerate.

TO TURN THE CRUISE CONTROL COMPLETELY OFF:

Press the ON-OFF/CANCEL switch *twice*.

Pressing the ON-OFF/CANCEL switch *once* pauses the cruise controls but keeps the system ready and the speed in memory.
A *second* press turns the system off completely and wipes the speed memory clear.
A *third* press turns the system back on to ready, without any speed memory.
In addition, turning off the ignition completely turns off cruise control and wipes the speed memory clear.

WARNING:

- Don't use the cruise control when road or driving conditions require varying speeds. A constant speed isn't practical in heavy or varying traffic, or on winding, slippery or rough roads.
- Remember that when both the 'CRUISE' and the 'ACTIVE' symbols are showing the cruise control is maintaining your speed. Taking your foot off the accelerator pedal will not reduce speed. To deactivate the cruise control you must either press the brake pedal, press the clutch pedal (if the car has a manual transmission) or push the ON-OFF/CANCEL button.
- The cruise control will not apply the car's brakes. Therefore, the car may gain speed when going down steep hills.
- When climbing steep hills (particularly when towing) it is possible for the car to lose speed. You may need to switch off the cruise control and use the accelerator pedal.
- The cruise control will be cancelled if the traction control system becomes active, indicated by the flashing "LOW TRAC" warning.

CHAPTER 2

Locks

Page

2-2 Keys
2-3 Personal identity keys (if fitted)
2-4 Door locks (incl. deadlocking)
2-7 Alarm system (if fitted)
2-9 Ignition lock
2-10 Child safety rear door lock
2-10 Free-turning door lock
2-11 Boot lock
2-12 Tailgate lock
2-13 Bonnet lock

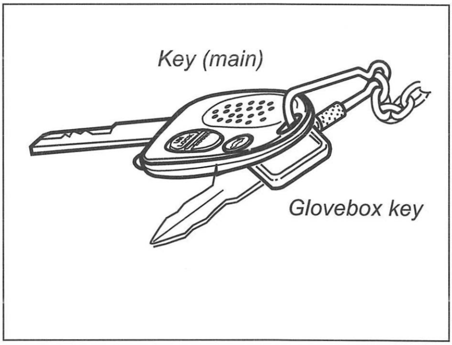
KEYS

Key (main)

This key operates all locks and ignition, except for the glovebox.

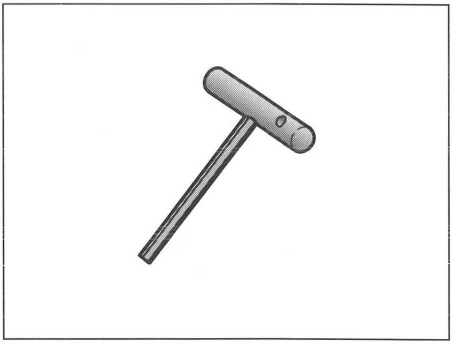
Glovebox key

The glovebox key locks and unlocks the glovebox. This key can usually be kept in the unlocked glovebox. Then, when leaving your car and master key with a car park attendant you can lock valuables in the glovebox, and take the glovebox key with you.



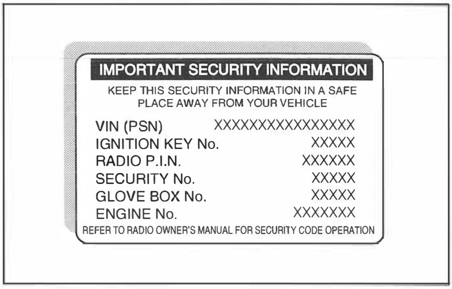
Roof rack key (wagons)

If your car has a roof rack, a key is provided to adjust the crossbars and tie-down anchors. The key is originally placed inside the glovebox of your new car. Refer Chapter 10 for information about roof racks and adjustment of the crossbars.



Key numbers - security card

The security card lists various security numbers for your car, including key numbers, and the radio PIN. Please keep the card in a safe place, away from your car. If a key is lost, a replacement can be ordered through any Holden Dealer by quoting the key code number, security number and providing proof of ownership.



IMPORTANT SECURITY INFORMATION

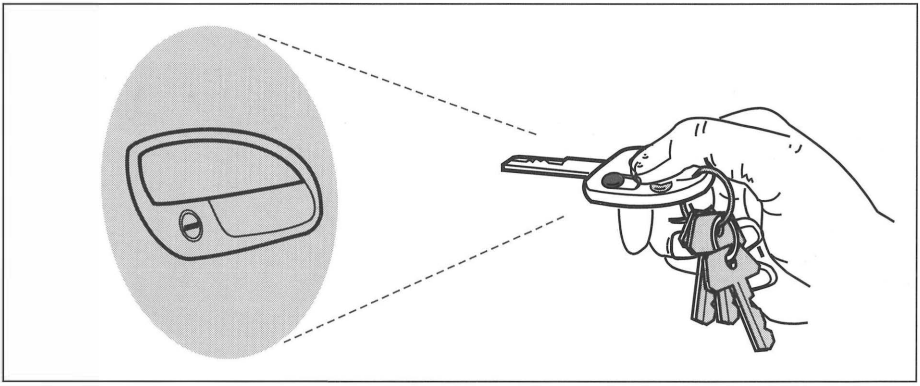
KEEP THIS SECURITY INFORMATION IN A SAFE PLACE AWAY FROM YOUR VEHICLE

VIN (PSN)	XXXXXXXXXXXXXXXX
IGNITION KEY No.	XXXXX
RADIO P.I.N.	XXXXXX
SECURITY No.	XXXXX
GLOVE BOX No.	XXXXX
ENGINE No.	XXXXXXX

REFER TO RADIO OWNER'S MANUAL FOR SECURITY CODE OPERATION

KEYS cont.

Pressing buttons



When pressing the key buttons ensure that other keys on the key ring are not between the main key and the car. Other keys can obscure the signal being transmitted to the car. Also refer to "Notes about the keys" on page 2-6.

Personal identity keys (if fitted)

This system provides two different memories of electronic settings, for different keys. For-instance, one driver may have a preferred radio station. Pressing the "UNLOCK" button on their key will automatically customise the radio for that driver. The other driver however, may prefer a different station. Pressing *their* "UNLOCK" key button will tune the radio to *their* station.

Two different sets of memory are available.

The features remembered by the keys are (if fitted):

- antenna height memory,
- instrument dimmer level,
- climate control settings,
- automatic transmission power/economy selection,
- radio settings,
- trip computer settings,
- time delay for automatic lights off.

Features revert to the last setting used for each key.

Note about additional keys: Only two different memories are available, memory one and memory two. If a third key is made, the third key becomes memory one and the other two keys become identical memory twos.

Radio note: If the doors were *not* unlocked by pressing the "UNLOCK" button on the key, the radio and antenna does not change memory settings when the ignition is turned to "accessories". The ignition must be turned to "ON" for the key to be identified.

If the car's battery has been disconnected the key may "forget" some settings. Your adjustments will be remembered by the key the next time you adjust the feature.

DOOR LOCKS

Lock

Doors are locked when the lock knob is down. For safety reasons, the car cannot be locked if the key is in the ignition or if the driver's door is open.

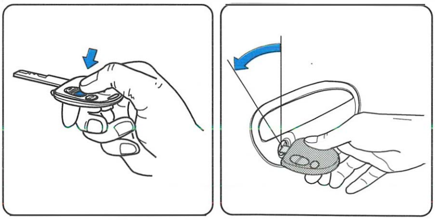
PREFERRED METHOD: Press the "LOCK" button on the key within 4 metres of the car to lock all doors (and wagon tailgate) and set the alarm (if fitted).

The car's turn signals will briefly flash once when the signal has been received.

ALTERNATIVE METHOD: Insert the key in the driver's door lock and turn towards the rear of the car, then turn it back to the vertical position and remove.

IF STAYING IN THE CAR: Press the door lock knobs down. Note that pushing down either front door lock locks all doors at the same time.

Once to lock



Deadlock

For further protection when leaving the car, you can 'deadlock' the doors. Deadlocking electronically jams all the electric locks so that no door can be opened, even if entry is gained by breaking glass.

CAUTION: Do not use deadlock if there are people in the car. The doors cannot be unlocked from inside.

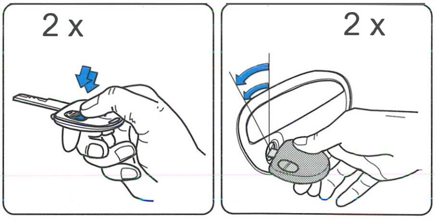
To set deadlock:

PREFERRED METHOD: Press the LOCK button twice in succession. That is, press the LOCK button once to lock the car, then press it again (within 10 seconds) to set the deadlock.

The car's turn signals will give a long flash of approximately 3 seconds.

ALTERNATIVE METHOD: Insert the key in the driver's door lock and turn the key TWICE to the position shown in the illustration. That is, once to lock the doors, then a second time to set the deadlock.

Twice to deadlock



To unset deadlock:

Press "UNLOCK" on the key (within 4 metres of the car). This will unlock the doors. Therefore, undeadlocking happens naturally, when unlocking the doors.

DOOR LOCKS cont.

Unlock

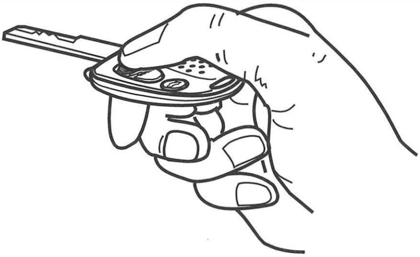
Press the "UNLOCK" button on the key within 4 metres of the car. The turn signals flash twice and the interior light is turned on for a short time.

If "UNLOCK" is pressed once, only the driver's door will unlock. The other doors will *undeadlock* but will remain locked. If "UNLOCK" is pressed a second time, or is held down for more than half a second, all the doors (and wagon tailgate) will unlock.

If you prefer to have all doors unlock with a single press, the above 'two stage unlock' feature can be changed to 'all unlock' by computer, at your Holden Dealer.

If the key is turned in the door lock cylinder to unlock the car, the doors will unlock but the alarm (if fitted) will be set off as soon as a door is opened.

Press "UNLOCK" once to unlock driver's door; twice to unlock all doors.



Turn signals

If unsure whether the car is locked or deadlocked, press the LOCK button on the key. If the car is already deadlocked the lights will give a long flash; if the car is locked, the lights will give a short flash, but will not set deadlocking. If the LOCK button is pressed twice within 10 seconds, the lights will give a long flash to indicate that deadlocking has occurred.

If locking hasn't worked

- If the lock system is overloaded as a result of repeated operation in a short time interval, the power supply is cut off for approximately 20 seconds.
- Cars fitted with alarms: The door lock system has been designed to make the car's horn "chirp" if it detects a fault in the lock system when the "LOCK" button is pressed. You should check to see that the doors have locked.
- Cars without alarms: The door lock system has been designed to flash the turn signals when the car is locked with the "LOCK" button. If this doesn't happen it indicates a fault and you should check to see that the doors are locked.

How the door lock knobs work

- Pulling up any door lock knob unlocks all doors.
- Pushing down either of the front door lock knobs locks all doors; pushing down either of the rear door lock knobs locks only *that door.*
- Either rear door may be locked behind you by depressing the lock knob when the door is open, then shutting the door firmly. It is not necessary to hold the handle up when shutting. The lock knob of front doors, however, cannot be depressed when either door is open.

DOOR LOCKS cont.

Notes about the key

- The key has a lithium battery inside the key head, which should last more than 5 years with normal use. A weakening battery is indicated by a progressive "loss of range", which means you must be closer to the car when pressing the key. Originally the key should have a range of 4 metres. The battery inside the key is not re-chargeable. A flat key battery requires replacement of the key head.

- Tinting the car's windows reduces the range of the key if the tinting material has a metallic film.

- When a button on the key is pressed it sends a signal to the car. The receiver of the signal can be seen as a small rectangle on top of the dash, in the centre. The receiver is also used to measure sunlight. It is therefore vital that the receiver is clean, not covered and that there are no metal objects close by, as this may block the signals.

- The "LOCK" button on the key won't work if the ignition is switched on or if the driver's door is open. The 🚗 button on the key won't work if you are travelling over 15 km per hour.

- The key buttons may not work if parked near high radio activity, such as under TV towers (most likely in high lookout car parks).

  The key buttons won't work if the battery inside the key is flat. Try turning the key in the ignition to ON, then OFF again and remove. Try pressing "LOCK" on the key again. If it still does not work a replacement key may be needed from your Holden Dealer.
  If, for any reason, pressing the key buttons won't work, the doors can still be locked and unlocked by turning the key in the driver's door lock.
  - Turn the key anti-clockwise (once) to lock all doors.
  - Turn the key anti-clockwise a second time to set the deadlock.
  - Turn the key clockwise to unlock and unset the deadlock. If the car is fitted with an alarm system opening the door may cause it to trigger. If this happens turn the key in the ignition to ON to shut off the alarm.

- If the battery in the car is so flat that there is not enough power to unlock doors when the "UNLOCK" button on the key is pressed the driver's door can still be unlocked by forcefully turning the key clockwise in the door lock. The snib button does not pop up but pulling the handle will still open the door.

ALARM (if fitted)

Switching on and off

The alarm system is turned on when the "LOCK" button on the key is pressed, and turned off when "UNLOCK" is pressed. Therefore, locking the doors by pressing "LOCK" not only locks all the doors but (after a short delay) also sets the alarm system.

When set off

The alarm is triggered when any of the doors, bonnet or boot are opened or a `hot-wire' attempted....... an alarm sounds and the turn signals and dome light flashes.

To turn it off: - press "UNLOCK" on the key

or

- turn the ignition to ON

or

- allow the alarm to time out and reset itself, to guard against further break-in attempts.

'Break-in'

The exterior turn signals should flash twice when returning to your car and pressing UNLOCK on the key.

If they flash three times an attempted break in has occurred whilst the car was armed.

If you wish to find out what set the alarm off, carefully watch the security light, located above the trip computer switches in the dash:

2 flashes (Berlina and Calais models) = bonnet
3 flashes (Berlina and Calais models) = boot or tailgate
" (all other models) = bonnet, boot or tailgate
4 flashes = passenger door, either front or rear
5 flashes = driver's door
6 flashes = hot wire was attempted (ignition on without key inserted).

To cancel the flashing code, turn the ignition with the key to ON.

ALARM (if fitted) cont.

Notes

- Remember, the alarm system is turned off and on when the "UNLOCK" and "LOCK" buttons on the key are pressed. When the alarm system is switched ON, turning the key in the lock and then opening the doors or tailgate triggers the alarm. The alarm system thinks a break-in has occurred.

  When the alarm system is turned on, you may open the boot by pressing 🚗 on the key. This does not set off the alarm, but leaves the alarm system on and undisturbed.

  Closing the boot "re-arms" the boot alarm.

- The "LOCK" button on the key will not function when the ignition is turned ON or the driver's door is open.

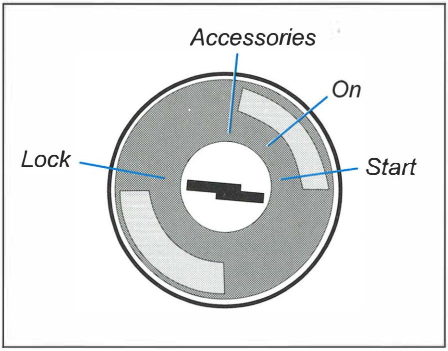
- Pressing "LOCK" on the key:
  - locks all doors,
  - disables the engine,
  - sets the alarm (after a short delay),
  - switches the interior dome light off, if already on,
  - withdraws the power antenna (if fitted),
  - flashes the exterior turn signals once,
  - deactivates the power windows (if fitted).

  Pressing "UNLOCK" once on the key:
  - unlocks the driver's door,
  - enables the engine (as does turning the ignition key in the ignition switch),
  - switches off the alarm,
  - switches on the interior dome and power windows (if fitted) for a short time,
  - flashes the exterior turn signals twice,
  - switches on the head lights for 30 seconds (see "lights", Chapter 1).

  Pressing "UNLOCK" a second time (or keeping the "UNLOCK" button depressed for more than half a second):
  - unlocks all the other doors,
  - re-activates head lights for a further 30 seconds.

IGNITION LOCK

CAUTION: Do not turn the engine off while the car is moving or there will not be any power assist for brakes or steering. Never remove the key while the car is moving, as this will lock the steering.



Lock

Accessories, electrical systems and engine are off.

The key is inserted and removed only from the "LOCK" position.

To help guard against theft, your car's engine is automatically disabled shortly after turning the key to the "LOCK" position, indicated by the flashing light above the trip computer switches.

In addition, the steering is automatically locked when the key is removed. To release the steering lock and reconnect the engine, re-insert the key and turn it clockwise.

If you have trouble turning the key to unlock the steering, turn the steering wheel slightly to the right or left while turning the key clockwise.

Accessories

The engine is not running but accessories such as the radio and wipers still operate.

On

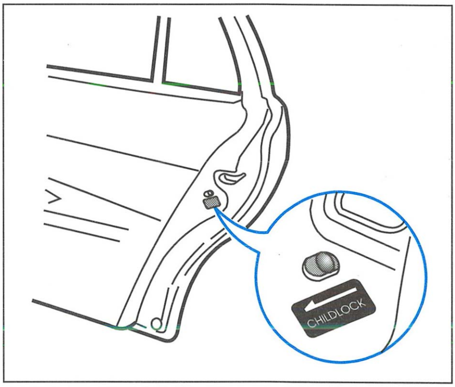
The engine is ready to start and all electrical systems are active.
Note the warning lights, which are designed to illuminate at the ignition ON position, indicate the systems are working. These are explained near the start of Chapter 1.
Do not leave the switch in the “ON” position for a prolonged period, unless the engine is running, otherwise the battery will discharge.

Start

This is the position for starting the engine. The key should be released from this position as soon as the engine starts. It automatically returns to the ON position.

CHILD LOCKS, FREE TURNING LOCKS

Rear "child proof" door locks



"Child safety locking" helps prevent rear doors being accidentally opened by small children in the car.

The locks are provided on the rear edge of rear doors, accessible when the door is open.

When the lever is in the lock position (to the front of the car) the rear door cannot be opened from the inside. It can be opened only from the outside.

CAUTION: For safety, you should always check that the lock is operating correctly (after setting) by trying to open the door from inside the car.

Free turning door locks

The door lock cylinder is designed to free turn if it is forcefully rotated without the correct key or if the correct key is not fully inserted. To reset, turn the lock with the correct key until its slot is vertical, remove the key and then re-insert it. If the lock still free turns, turn the key through 180 degrees and repeat the operation.

Note that this feature is provided as a theft deterrent - to prevent the lock being forced open. The force required to make the key "free turn" reduces each time. As the force gets easier with each "free turn" please do not attempt to demonstrate or test this feature, and always remember to fully insert the key when locking and unlocking the doors.

If you have problems contact your Holden Dealer. Remember that your car is covered for the first 3 years by Roadside Assist, refer Chapter 9.

BOOT LOCK

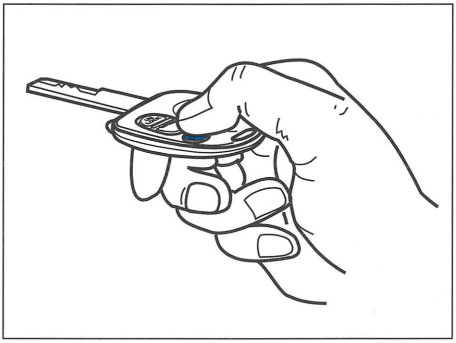
Use one of the methods shown below to unlock the boot. After partly opening the boot lid, gas struts automatically take over to lift and hold the boot lid in the fully open position. The boot re-locks automatically when pushed shut, so be careful not to leave keys in the boot, as they will be locked in when it is shut.

Key button

Unlock the boot by pressing 🚗 on the key.

The button on the key must be pressed for more than half a second and travelling speed must be less than 15 km per hour for the signal to work. This is to stop accidental opening.

When the boot is unlocked, it can then be fully opened from outside.

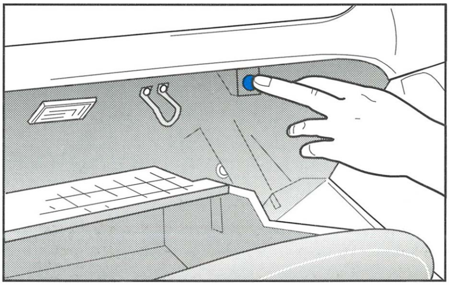


Glovebox button

Push the button in the glovebox to unlock the boot, provided you are not travelling over 15 km per hour or the alarm system is ON.

Then from outside, lift up the boot.

For added vehicle security, the glovebox button is disabled when all doors are locked with the LOCK button on the key.

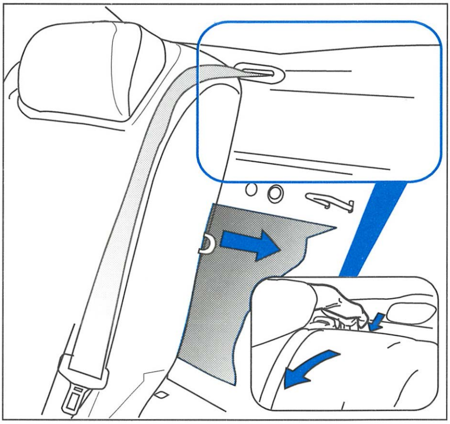


Emergency release

An emergency release is provided behind the centre of the rear seats.

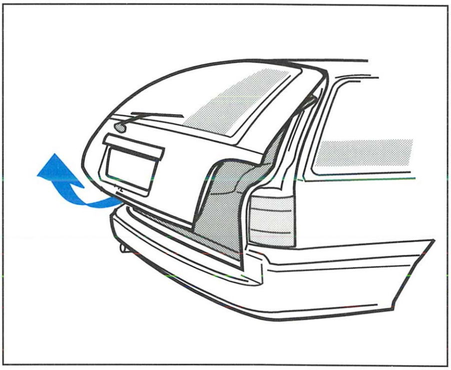
Push down the lock button at the top of the middle section and fold the middle section down.

The release is at the top of the cavity. Pull the ring sideways, towards the centre of the car to open the boot.



TAILGATE LOCK

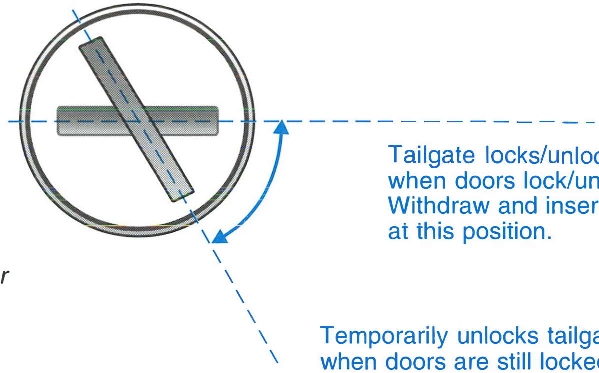
CAUTION: To prevent dangerous exhaust fumes entering the car, close the tailgate when the engine is running. If it is necessary to leave the tailgate open (while carrying bulky cargo) close all windows, switch heater controls to "fresh" and set fan to highest speed.



The tailgate is locked when the doors are locked, and unlocked when all the doors are unlocked.

To open: When unlocked, push the tailgate button. After partly opening the tailgate, gas struts automatically take over to lift and hold the tailgate in the fully open position.

The tailgate *can* be unlocked with the master key. However, the key cannot be withdrawn while it is unlocked - you must turn the key back to the upright (lock) position in order to withdraw the key. This ensures that the tailgate is locked when the doors are locked.

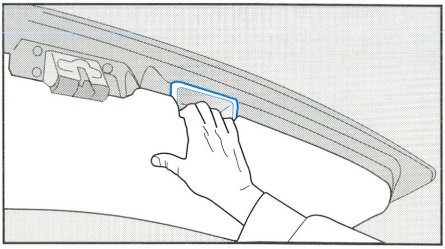


Tailgate locks/unlocks when doors lock/unlock. Withdraw and insert key at this position.

Push lock cylinder inwards to open

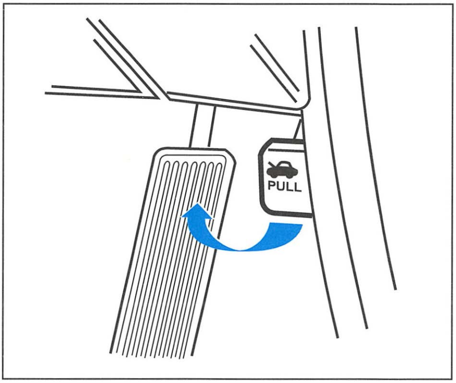
Temporarily unlocks tailgate when doors are still locked.

A pull down handle is provided to help you close the tailgate.



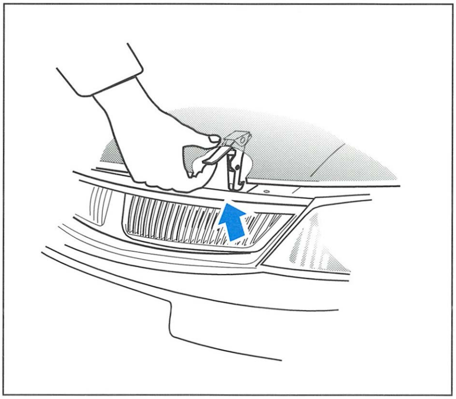
BONNET LOCK

From inside the car, pull the lever shown towards you.



This allows the bonnet to release but is prevented from opening by the safety catch. To open completely, reach under the centre of the bonnet and move safety catch upwards. Hold in this position and raise the bonnet.

After you have partially lifted the bonnet, gas struts automatically take over, to lift and hold the bonnet in the fully open position. For closing, simply pull the bonnet down and push firmly back into place.



CHAPTER 3

Know your car

Page

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3-17 Footrest
3-17 Fuel filler release
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FRONT SEAT

SINGLE SWITCH TYPE

The switch fitted to these types of seats electrically controls the height and tilt adjust of the front seats. The other seat adjustments are made manually.

Driver's height and tilt adjust

Move the whole of the switch up or down to move the whole of the seat up or down.

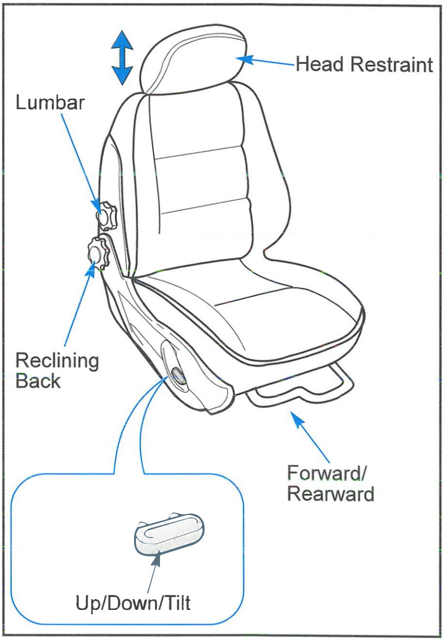
The switch can also be tilted to adjust the seat angle. Tilt the switch up at the front to tilt the front of the seat up. Similarly, tilt the switch down at the rear to tilt the seat down at the rear.

Backwards/forwards

Lift up the bar at the front of the seat, then slide the seat forwards or backwards. Release the bar. Try to move the seat back and forth to check that the catch is fully engaged.

Do not adjust the driver's seat when the car is moving, as the seat could move suddenly, causing the driver to lose control.

Refer following page for backwards/ forwards adjustment if electrically adjusted.



Reclining back

Turn the lower toothed wheel on the door side of the seat. The seat back moves in the same direction as the top of the wheel.

CAUTION: To avoid reducing the effectiveness of seat belts, seats should only be semi-reclined when the car is moving. The fully reclined position should only be used when the car is stationary.

Lumbar support (if fitted)

Move the upper wheel (on the door side of the seat) to alter support given to the lower part of your back.

Head restraint

This safety feature is not intended as a headrest. It is solely for the reduction of whiplash neck movement in a car accident.

To adjust the height of the head restraint, pull up or push down, as required. The upper edge of the head restraint should be approximately at eye level, never at neck level.

In addition, some models have several tilt angles provided. Pull the head restraint forward. When the last position has been reached, a further pull returns the head restraint to the rearward, upright position.

FRONT SEAT cont.

DUAL SWITCH TYPE

Two switches are fitted to these types of seats.

The front switch is used to electrically adjust the height, the tilt and the movement of the seat forwards and backwards.

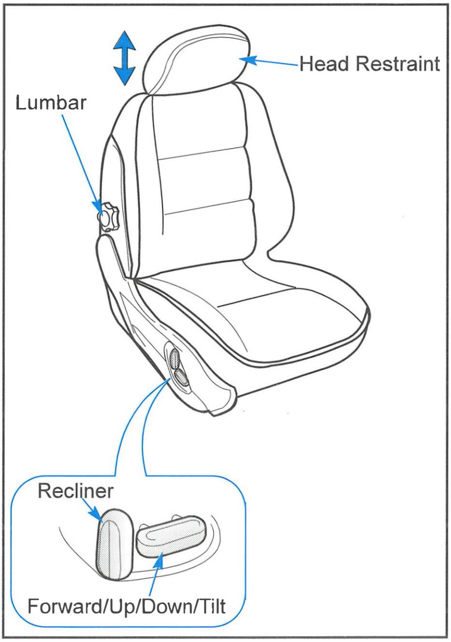
The rear switch is used to electrically adjust the angle of the back of the seat.

Adjustment to lumbar support and head restraints are made manually.

Height and tilt adjust (front switch)

Move the whole of the switch up or down to move the whole of the seat up or down.

The switch can also be tilted to adjust the seat angle. Tilt the switch up at the front to tilt the front of the seat up. Similarly, tilt the switch down at the rear to tilt the seat down at the rear.



Backwards/forwards (front switch)

Move the whole of the switch forwards or backwards, as required. The seat moves in the same direction as the switch.

Reclining back (rear switch)

Tilt the switch to adjust the angle of the back of the seat. The seat back moves in the same direction that the switch is tilted to.

Lumbar support

Move the wheel (on the door side of the seat) to alter support given to the lower part of your back.

Head restraint

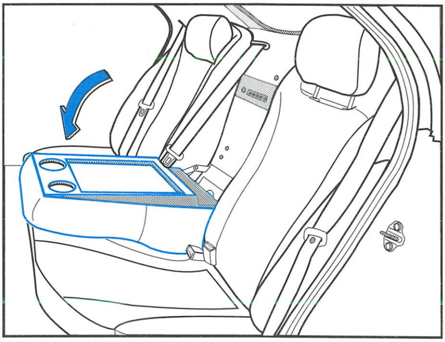
This safety feature is not intended as a headrest. It is solely for the reduction of whiplash neck movement in a car accident.

To adjust the height of the head restraint, pull up or push down, as required. The upper edge of the head restraint should be approximately at eye level, never at neck level.

In addition, several tilt angles are provided. Pull the head restraint forward. When the last position has been reached, a further pull returns the head restraint to the rearward, upright position.

REAR SEAT

Sedan rear seat

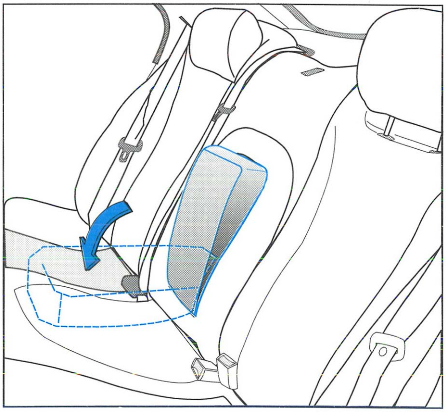


The middle section of the rear seat may be folded forwards to gain access to the boot area or for carrying long, awkward loads.

To fold the middle section forward, push down the lock button at the top of the middle section.

To return to the upright position, simply push back into place and check to ensure the lock button is engaged and the seat belt is free.

In addition, some higher luxury models have an armrest provided in the middle section. To fold down the armrest, insert your hand at top of the armrest and pull down. Push up armrest if upright position is required.



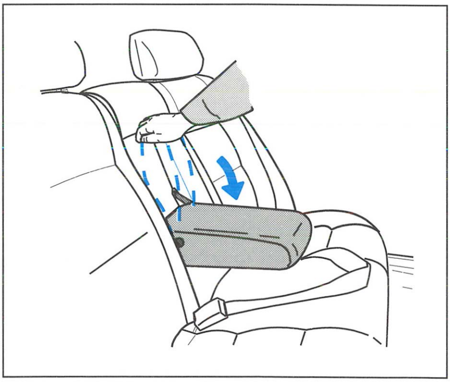
Note that the small toggles located under the front of the rear seat are provided for ease of seat removal. They are not designed for any other purpose.

Adjustable rear head restraints (if fitted)

This safety feature is not intended as a headrest. It is solely for the reduction of whiplash neck movement in a car accident.

To adjust the height of the head restraint, pull up or push down, as required. The upper edge of the head restraint should be approximately at eye level, never at neck level.

Wagon rear seat

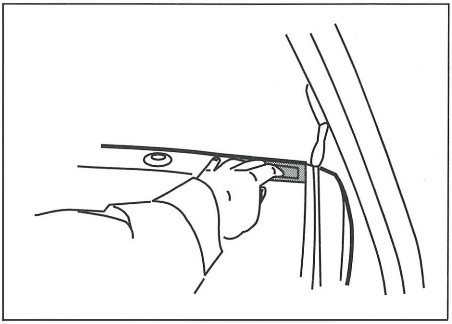


Berlina wagon models have an armrest provided in the middle of the rear seat. To fold down the armrest, insert your hand into the top of the armrest and pull down.

The armrest should always be tucked back up into the seat-back when folding the seat-back forwards, see following page.

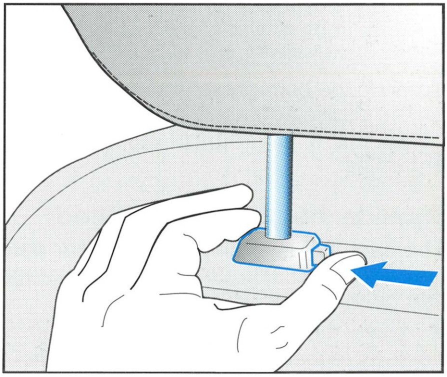
WAGON REAR SEAT FOLD DOWN

The rear seat is divided into two sections. Either section or both sections may be folded down.

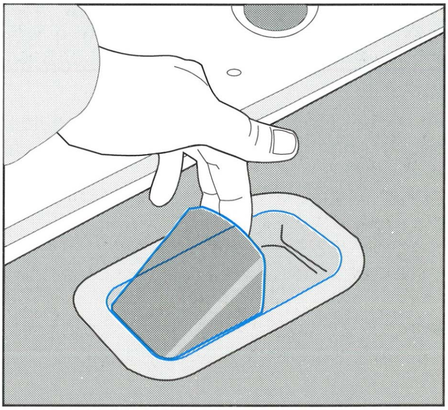


To fold down a section:

1. Push down the lock button located on the upper edge of the seat.
2. Pull the seat-back forward and down.



3. If a rear head restraint contacts the front seat while folding the rear seat down the rear head restraint should be removed.
   Push in the locking clip at the base of the head restraint and pull the head restraint up and out.
4. Apply pressure to the seat-back when in the down position to lock the seat into place.



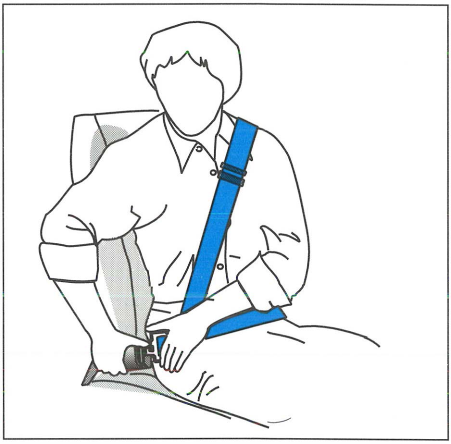
To return the seat-back to the upright position, pull the release handle outwards while raising the seat-back. Return the seat to the upright position. Ensure that the seat-back is secured firmly in place and that the seat belts are free.

Replace any head restraints by pushing in the locking clip located where the head restraint slots into the seat-back while inserting into place.

CAUTION: To avoid injury from passing traffic, don't stand on the right hand side of the car (if the car is parked at the kerb) when converting the rear seat.

SEAT BELTS

Lap/sash belts



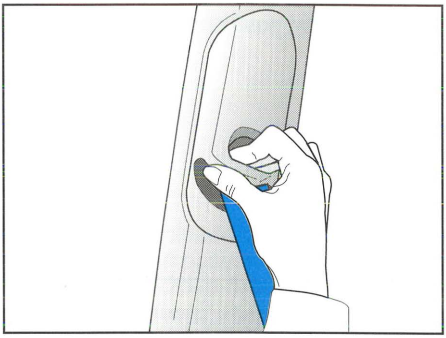
To fasten, pull the metal tongue across your body and clip into the buckle. When the metal tongue is locked safely into place you will hear a "click". After fastening, settle the belt at the hip, go across to the buckle, then up under the sash. Any extra belt length retracts automatically.

The lap section should be worn as low as possible on your hips, not on your waist. Make sure the belt is free from twists and fits firmly.

The "emergency-locking retractor belt" allows you to move while the car is travelling normally but locks immediately on fast braking, impact with a solid object or any quick movement by the wearer.

To undo the belt, press the release button on the buckle and allow the belt to retract. Check that it fully retracts without twisting or turning.

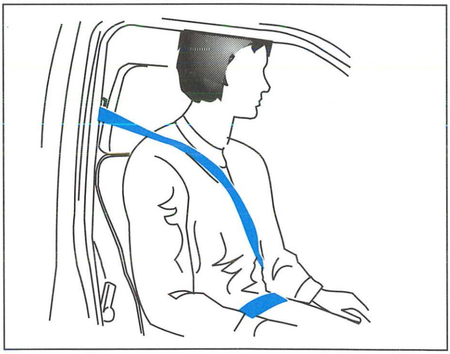
Shoulder height adjust (if fitted)



The seat belt is anchored to the car near your shoulder. The position of anchorage can be moved to different heights.

Squeeze the adjuster and move it up or down as required. Ensure the anchor clicks into position.

Short people should select a low anchor position, tall people a higher one. This ensures, for both safety and comfort, that the webbing of the seat belt fits on the shoulder.



For your safety, the driver's side shoulder anchor should not be adjusted while the car is in motion.

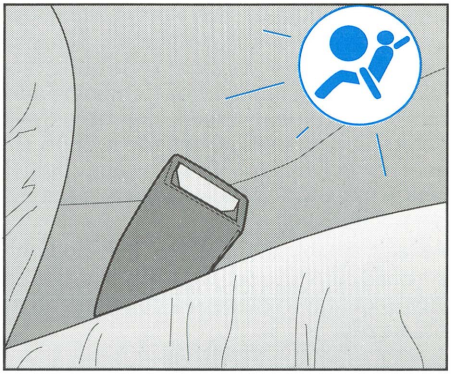
SEAT BELTS cont.

Seat belt pre-tensioners

The front seat belt system incorporates seat belt pre-tensioners. In the event of a frontal collision the belt buckles are pulled downwards; the diagonal and lap belts are instantaneously tightened.

If the belt tensioners are actuated, the seat belt warning light on the instrument panel won't go out after the usual few seconds. This is designed to remind you that the pre-tension system has been used and, therefore, needs to be replaced by your Holden Dealer. The seat belts will remain operational, apart from this safety feature.

If the light comes on at any other time you should see your Holden Dealer immediately to have the system checked.



Australian law requires that the driver and all passengers are properly restrained at all times with the seat belts provided in the car. Failure to do so could increase the chance of injury and/or the severity of injury in accidents.

WARNING:

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oil and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

It is essential to replace the entire assembly after it has been worn in a severe impact, even if damage to the assembly is not obvious.

Belts should not be worn with straps twisted.

Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

No modification or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

The positioning of the tongue restrictor must never interfere with, or stop, the belt from fully retracting.

CHILD RESTRAINTS

Children should be restrained at all times when travelling in a car.

Up to the age of about 6 months, babies should be carried in a rearward-facing infant capsule. Between the ages of 6 and 12 months, they should be in a rearward-facing child seat. Between the ages of 12 months and 3 years, children can be carried in a forward facing infant seat. When they outgrow this type of seat (approximately 3 years old depending on their height and weight) children can be seated in an approved booster seat, restrained by a lap/sash safety belt. By the age of approximately 6 years, when they weigh more than 32 kilograms and are over 100 cm tall, children can graduate to a lap/sash safety belt alone.

Always ensure that the seat belt fits firmly around the infant restraint.

If a child can't see out of the window, don't raise him/her by means of an ordinary cushion. It will not stay in place in a collision and the child can slip out of the straps and become entangled.

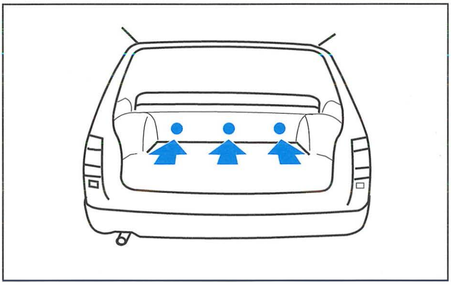
WARNING: Child restraint anchorages are designed to withstand only those loads set out in Australian Standard AS 1754-1991 (and subsequent amendments). Under no circumstances are they to be used for adult seat belts or harnesses or for attaching other items or equipment to the vehicle.

Your car is fitted with three anchorage points for child restraints. An anchor fitting has been provided in the centre position.

WARNING:

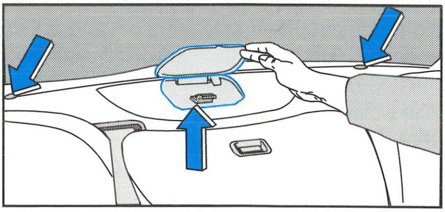
1. NEVER install a rearward facing child restraint in the front seat of a car with a passenger's air bag. The child could be seriously injured if the passenger's air bag inflates, as the child's head would be very close to the inflating air bag.
2. NEVER install a child restraint in the front seat of a car fitted with Side Impact Airbags. Remember that it is safest for children to be seated in the rear seats.
3. It is always better to install a child restraint in the rear seat.
4. Where legally allowable, you may install a forward-facing child restraint in the front seat but always move the passenger's seat as far back as it will go.

Wagons: anchor locations are on the rear of the rear seat backs.



Sedans: anchor locations are on the parcel shelf.

The centre position is hidden by a hinged cover. Pull the cover up at the front to access the anchor.



ADDITIONAL CHILD RESTRAINTS

One anchor fitting was installed in your car, in the centre position, shown on the previous page.

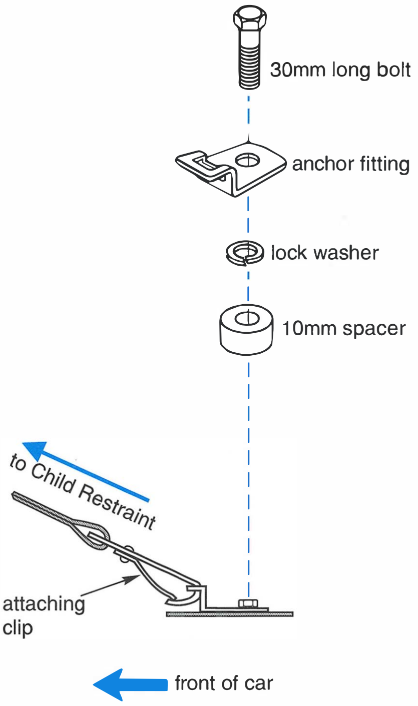
The illustrations on this page show how to install additional anchor fittings to the other anchorage points. These can be purchased from your Holden Dealer.

These illustrations are only applicable to child restraints approved to Australian Standard AS 1754-1991 (and subsequent amendments). These illustrations are *not* applicable to earlier child restraints, as these restraints may not attach securely to this type of anchor fitting.

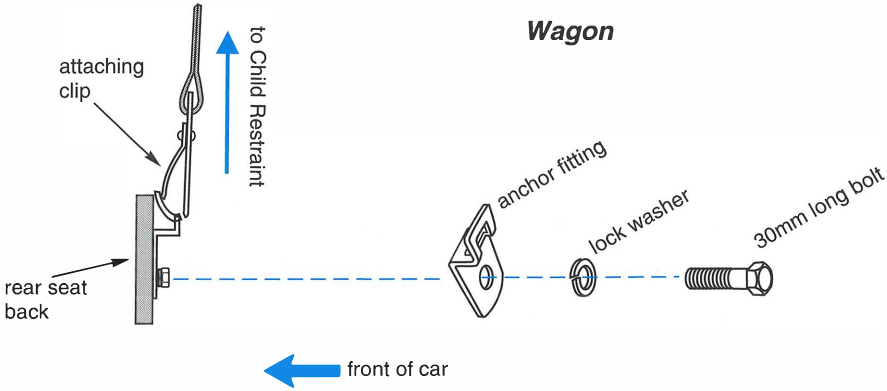
If you wish to put a child restraint in either of the outer positions, first remove the cover plug.

Then, install an additional anchor fitting, using the bolt, lock washer and spacer (for sedan only), as per the illustrations. Ensure that the bolts are securely tightened between 15 and 25 Newton metres. Check with your Holden Dealer if unsure.

Sedan


30mm long bolt
anchor fitting
lock washer
10mm spacer
to Child Restraint
attaching clip
front of car

Wagon


attaching clip
to Child Restraint
rear seat back
anchor fitting
lock washer
30mm long bolt
front of car

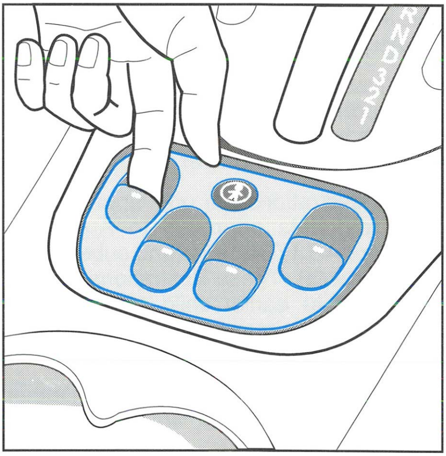
POWER WINDOWS

Power windows

The main window switches are located between the front seats.

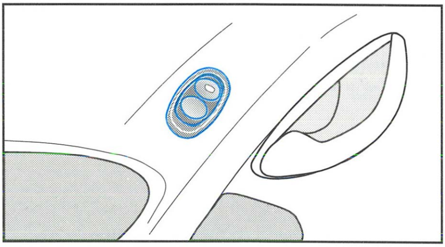
The switches are operational when the ignition is turned to ON or the UNLOCK button on the key is pressed; green lights on the switches indicate when they are active.

To raise the window, pull up the switch; to lower, push down the switch.



Rear power windows (if fitted) can also be operated by individual switches located on the rear doors.

These *rear door* switches can be deactivated / reactivated by pressing the "child safety" switch in the centre console. The rear window switches are deactivated when the switch is in the down position.



"Auto down" - driver's window only

Hold the switch down for more than half of a second and remove your finger. To interrupt the "auto down" move the switch up or down again.
Rock the down button to open the window in short steps.

Time delay

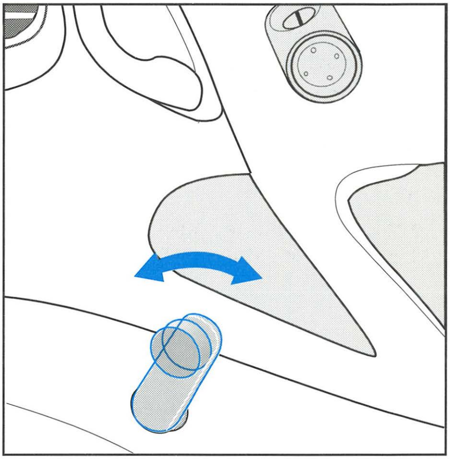
The windows can be operated for about one hour after turning off the ignition or pressing UNLOCK on the car key, provided all the doors are kept shut. Once a door is opened, the windows can only be operated for 45 seconds. The green "active" light on the switches will go off when the time delay finishes.

Pressing LOCK on the car key immediately deactivates the windows.

MANUAL WINDOWS AND MIRRORS

Manual windows

Turn the winders on each door to raise or lower the window.

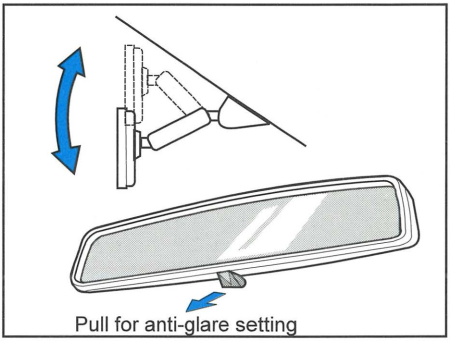


Internal rear view mirror

Moving the lever on the lower edge of the mirror reduces headlight glare from following cars when driving at night.

During daylight driving, the lever should be set forward, away from the driver. At night, flick the lever towards the driver.

Note that rear view clarity is reduced when the mirror is set to the 'night' position.



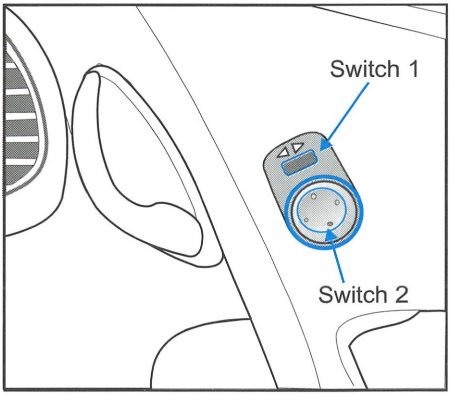
External rear view mirror

Mirror angle can be adjusted using the switches on the driver's door armrest, when the ignition is turned ON.

Rock *switch 1* to left mirror, or right mirror.

Press the dot on the edge of *switch 2* in the direction you wish the mirror to move. The mirror can move up, down, left or right.

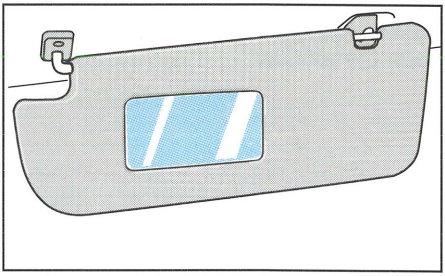
The left mirror is convex shaped, to provide a wider view. Objects appear further away than they actually are.



MIRRORS cont.

Looking glass

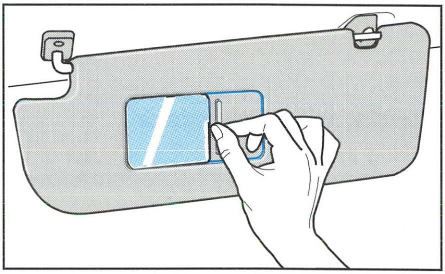
A looking glass mirror is provided on some models, on the passenger's side sunvisor.



Looking glass with cover

On some models, the looking glass mirror is provided with a cover.

Slide the cover to the right to show the mirror.

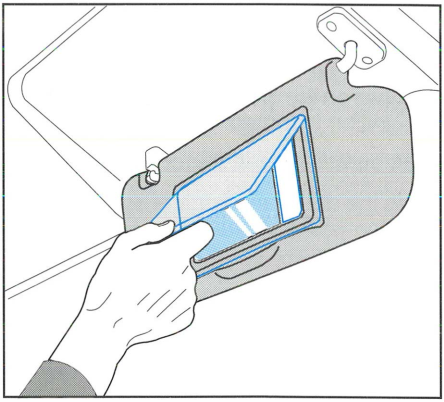


Looking glass with light

On higher luxury models a looking glass is provided on both the passenger and driver's side sunvisor.

The mirror is hinged at the top. To view the mirror, pull up from the lower edge.

The lights, at either side of the mirror, automatically turn on and off when the cover is opened and shut.



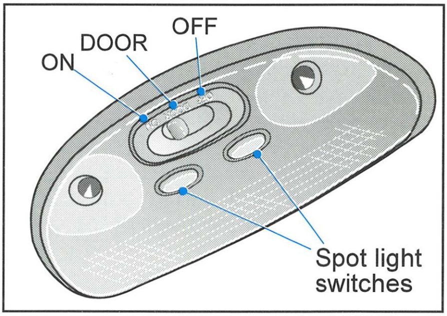
INTERIOR LIGHTS

Interior (dome) light

The light in the centre of the roof can be switched to: **OFF** (always off)
ON (always on)
or **DOORS**

DOORS: The light automatically switches on when a door is opened and switches off 30 seconds after all doors are closed. Switching the ignition on, however, switches the light off immediately (unless a door is open).

"Doors" is the centre position for the switch.



For your convenience, the interior light will automatically switch ON for 30 seconds when the ignition is switched off. On higher luxury levels, this will only happen at night. This feature can, however, be electronically turned off by your Holden Dealer, if required.

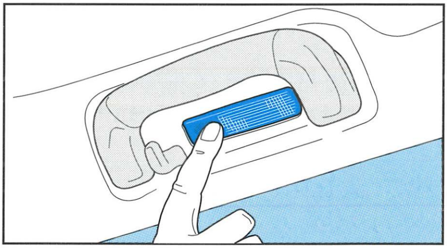
Usage of lights is also affected by the 1 hour Battery Saver, refer last page of this chapter.

Front spot lights (if fitted)

Front spot lights are incorporated in the dome light assembly. Press the individual switches to turn the spot lights off or on, as required.

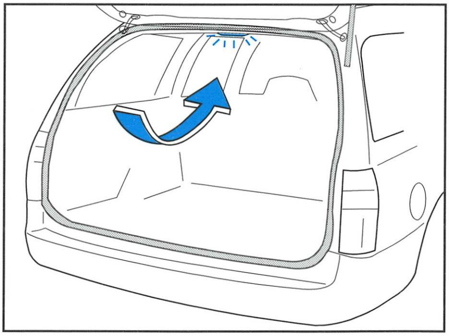
Rear reading lights (if fitted)

The rear reading lights (above the rear doors) may be individually turned to OFF, ON or to DOOR. If DOOR is selected, then they operate in conjunction with the centre dome light.



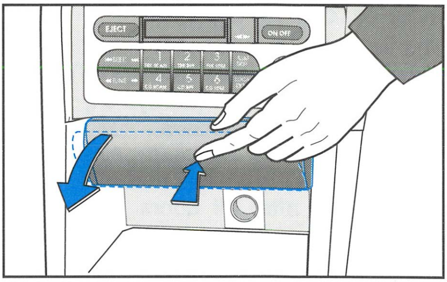
Wagon rear compartment light

The light comes on when the tailgate is open and automatically switches off when the tailgate is closed.



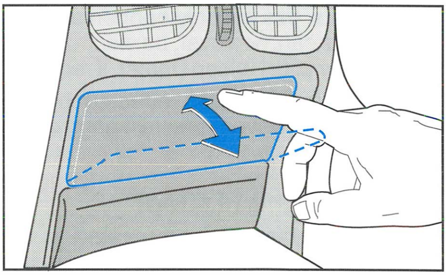
STORAGE COMPARTMENT, CIGARETTES & ASH TRAYS

The area directly beneath the radio has two uses. All cars are built with a storage compartment with a hinged cover. This can be replaced, if required, by an ashtray and lighter. Your Holden Dealer can order and fit the ashtray and lighter, after removing the storage compartment. At the same time, a rear ashtray and lighter can also be installed for you, at the rear of the centre console, if required.



Front storage compartment

Rear storage compartment (if fitted)

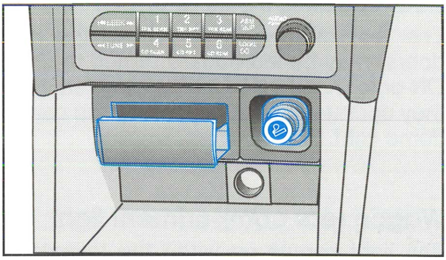


Cigarette lighters (if fitted)

The cigarette lighter works when the ignition is turned to either ON or ACC.

Press in the lighter knob; when the element is hot the lighter automatically pops out, ready for use.

The cigarette lighter should not be used as a power socket. A power socket has been provided in another location, see following page.



Ash tray (if fitted)

To use, pull the cover outwards.

To clean, open the ashtray and squeeze the top flap while pulling the whole tray out. Note that you may have to move the transmission control backwards when pulling out the front ashtray, so remember to have the park brake applied.

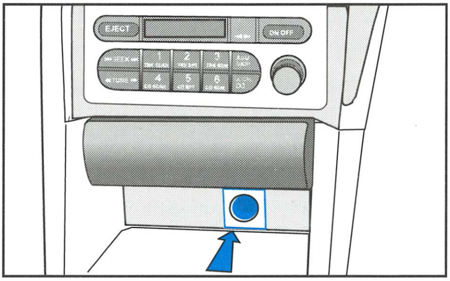
POWER SOCKET, CONSOLE, ASSIST GRIPS

Power socket

A power socket is provided on all cars, in front of the gear/transmission shift lever.

Note: Any accessory device (mobile phone, car fridge etc.) connected to the power socket must not exceed a current draw of 10 amps.

The power socket is operational when the ignition is turned to either ON or ACCESSORIES.

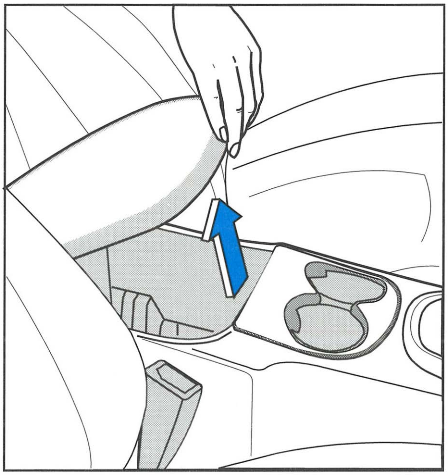


Centre console

The front armrest opens into a storage area. Lift at the front edge.

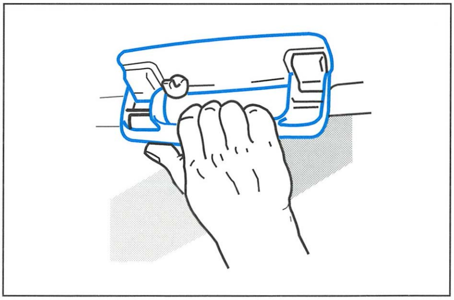
The lid opens to a near vertical position and should not be forced further backwards.

The rubber mat inside the console has been designed to hold a pen, coins, CDs and cassettes.



Assist grips

Assist grips are provided in the roof, above the doors, which will tuck back into place when released.



CUP HOLDERS

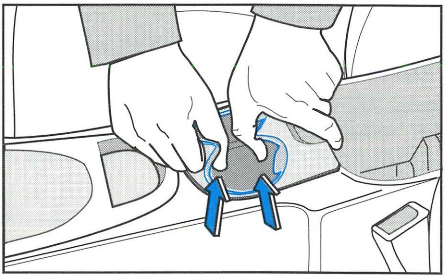
Front cup holders, open type

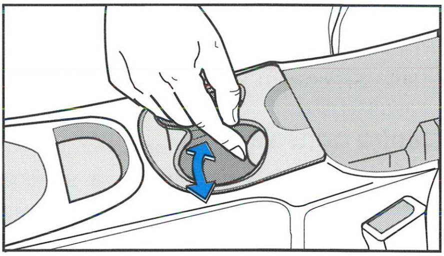
Don't forget full cups when you drive off!

Cup holders can be removed for cleaning. Grasp at the centre points and pull up. When re-installing, push the front end in first, then click down.

The cup holders are designed for holding standard size soft drink cans and smaller size bottles. They may not fit larger drink bottles or cups and these should not be forced in, or they may become jammed.

The tab provided to hold smaller cups is made of rubber. If, through rough use, it becomes torn or damaged it can be rotated as shown, as the shape is actually a circle.



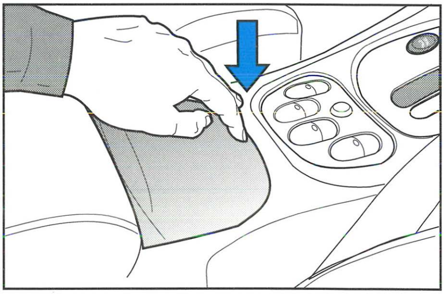


Front cup holders, lidded type (if fitted)

Push the lid to open.

Don't forget cups when you drive off.

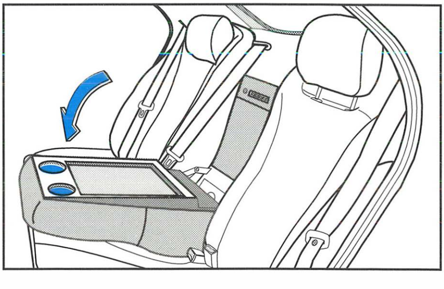
The cup holders are designed for holding standard size soft drink cans and smaller size bottles. They may not fit larger drink bottles or cups and these should not be forced in, or they may become jammed.



Rear cup holders (sedan only):

The middle section of the rear seat can be folded down on sedan models. The cup holders are fitted to the underside of the fold down seat.

Again, don't forget the cups when you drive off.

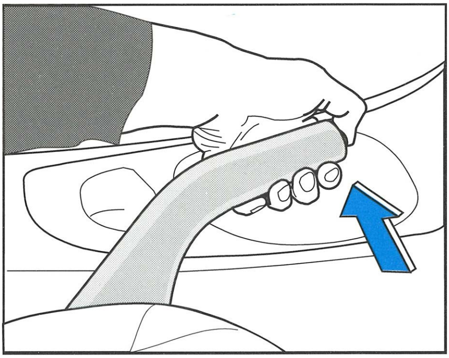


PARK BRAKE, FOOTREST, FUEL

Park brake

The park brake lever is located between the front seats.

- To apply, pull the lever straight up, without pressing the release button. To release, pull the lever slightly upwards, push in the release button on the end of the lever and whilst depressed, lower the lever all the way down.
- When the ignition switch is turned to ON, a symbol on the instrument panel indicates that the park brake is applied.
- NEVER drive the car with the park brake applied.
- If you attempt to drive off without releasing the park brake an audible warning chime will be heard.



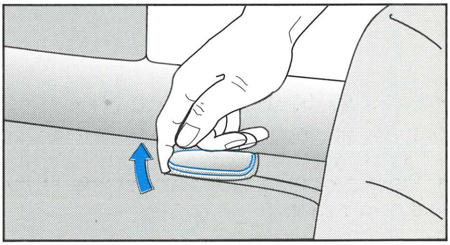
Footrest

The footrest for the driver's left foot is adjustable to three places. First undo the two screws on the right hand side of the footrest. Move the footrest forward or backward as required, then replace the screws. If you have any problems with this adjustment, your Holden Dealer will be happy to assist.

Fuel filler release

Pull up the release lever on the floor, to the right of the driver's seat.

Refer to Chapter 5 when refuelling.



BATTERY SAVER - 1 HOUR TIMER

To help save the battery, a "battery saver" feature has been built into this car. It will activate when there has been no electrical change for 1 hour (nothing switched on or off) after the ignition has been switched to:

- OFF (higher luxury cars such as Berlina and Calais)

or

- to OFF or ACCESSORIES (all other models)

At this time all the internal lights will switch off: dome, reading, foot well, ignition, door, glove box and boot.

The light system is "woken up" by many things, such as opening a door or switching on the ignition. However, if for example, the dome light switches off after 1 hour (and is still required to be ON) the system will not be woken up by switching the dome light off and on. It is suggested that the ignition switch be turned to ON, then back to OFF to wake up the affected electrical systems.

The battery saver timer can be adjusted anywhere between 5 and 255 minutes by your Holden Dealer. The 1 hour timer is the default setting when the car is built.

NOTES

CHAPTER 4

Driving

Page

4-2 Safety
4-3 Engine starting
4-4 Automatic transmission
4-6 Manual transmission
4-7 Anti-lock Brake System
4-8 Traction control system (if fitted)
4-10 Running-in
4-10 Driving precautions
4-12 Add on equipment, including snow chains, mud flaps, insect screens, driving lights and roo bars

SAFETY

Before entering the car

1. Check that windows, mirrors and lights are clean.
2. Visually check tyre inflation (check with a pressure gauge each week).

Before driving off

1. Be sure that all doors are closed and secured.
2. Position your seat for comfortable driving.
3. Adjust rear vision mirrors.
4. FASTEN SEAT BELTS.
5. Check that all the warning indicators light up when you turn the key to start the engine, refer Chapter 1.

Parking

1. Apply the park brake.
2. Automatic transmission: Place in PARK.
   Manual transmission: If pointing uphill or on flat ground place in FIRST gear.
   If pointing downhill place in REVERSE gear.
3. Shut all windows.
4. Turn ignition key to LOCK and remove the key.
5. Lock all doors by pressing the LOCK button on key when outside the car.
6. Set deadlocking, refer Chapter 2.

Note that the engine fan may keep going for several minutes after the ignition has been turned off. This is normal.

CAUTION:

Be careful where you park or drive. As with any car, do not park or operate this car in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.

Never leave the engine running in an enclosed space such as a closed garage or underground car park.

ENGINE STARTING

1. Ensure the park brake is firmly applied and release it only after you have started the engine and are ready to drive off.
2. MANUAL: Depress the clutch pedal and shift the gear lever to Neutral position. The clutch pedal can now be released.
   AUTOMATIC: Move the shift lever to P(park) or N(neutral) position. The engine will not start if it is in any other position.
3. Start the engine as outlined below (with your foot off the accelerator).

For cold or hot starting the procedure is the same. Simply turn the key to the start position and release when the engine starts.

YOU DO NOT HAVE TO DEPRESS THE ACCELERATOR PEDAL PRIOR TO, OR DURING, STARTING. DEPRESSING THE ACCELERATOR PEDAL WILL ONLY INCREASE CRANKING TIME AND WILL NOT HELP THE ENGINE TO START.

You should not subject the engine to high load conditions such as full throttle acceleration or high speeds until it has completely warmed up otherwise you may cause premature engine wear or engine damage.

Engine won't crank or start

- PRESS AND RELEASE THE UNLOCK BUTTON ON THE KEY and try starting the engine again.
- NEVER PRESS THE KEY BUTTONS WHILE CRANKING THE ENGINE.
- Remove the key from the ignition, re-insert the key and try starting the engine again.

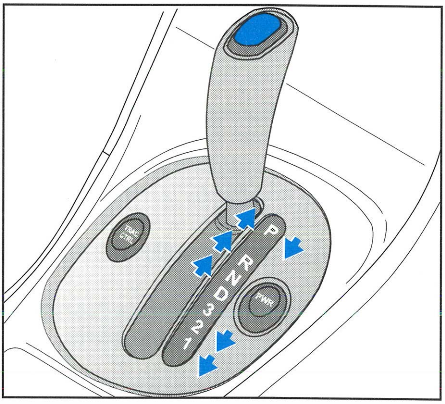
Flooded petrol engine

Cranking the engine for a lengthy period without it starting could result in flooding (too much fuel injected into the engine). If this occurs, press the accelerator down to the floor and hold it there while holding the key in the START position.

When the engine starts, allow the accelerator pedal to come up slowly.

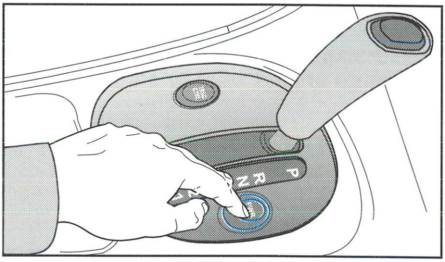
AUTOMATIC TRANSMISSION

Floor mounted shift



Push in the button on top of the transmission selector lever when shifting into any position indicated by the blue arrow.

Power/economy/cruise mode



The transmission operates in three modes: POWER, ECONOMY and CRUISE (if cruise control fitted). The POWER reminder light on the instrument panel glows when in the POWER mode.

POWER mode has revised automatic transmission shift points, to give the car a more responsive feel. ECONOMY mode is recommended on normal or freeway driving, as it gives better fuel economy.

If cruise control is maintaining car speed the transmission overrides POWER/ ECONOMY selection and operates in CRUISE mode, providing optimum driveability. CRUISE mode is neither a POWER or ECONOMY pattern and the POWER light switches off when cruise control is maintaining car speed.

Personal Identity Keys on higher luxury levels: when the key is inserted in the ignition and turned to ON the system identifies the key and sets the power/economy selection to the last adjustment used for that key. Also refer "Personal Identity Keys" in Chapter 2.

- Don't press the accelerator pedal with the brakes on in either 1, 2, 3, D or R. This will overheat the transmission.
- Don't use the accelerator pedal to hold the car on a slope. Use the brakes.
- Don't coast the car in N - this lessens your control and you may need to accelerate quickly in an emergency.
- Refer Chapter 7 when checking automatic transmission fluid level.
- The engine will not start unless the selector is in P(park) or N(neutral).

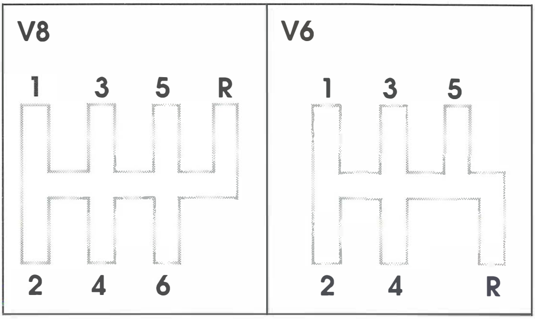
AUTOMATIC TRANSMISSION cont.

P (park)	This prevents the rear wheels from turning and so should be selected (together with the park brake) when leaving the car. Never select P until your car is fully stopped. The engine can be started in this position.
R (reverse)	Never select R until your car is fully stopped. Reverse lights will operate when R is selected and the ignition is on. After reversing, make sure the car has fully stopped before selecting another gear position. After selecting R, pause for a moment before accelerating, to allow the transmission to "engage" reverse gear.
N (neutral)	This is the out-of-gear position. You may then restart a stalled engine while the car is still moving or stopped.
D (drive)	This is the most effective position for normal or freeway driving. The drive position gives maximum fuel efficiency, as the transmission can choose the appropriate gear (1 through to 4) for the existing load and driving conditions. After selecting D from P or N, pause for a moment before accelerating, to allow the transmission to "engage" the forward gear. Use this position, together with the PWR mode when towing.
3 (third)	Third is most effective when overtaking and gives responsive acceleration and deceleration, especially in hilly areas. This position allows the transmission to shift between first, second and third gear as conditions require. Drive (4th gear) is excluded.
2 (second)	Use this position when going down a moderate gradient where you want to slow down a little with minimal use of the brakes. The transmission shifts to first or second gear as required. Move the lever back into the drive position to return to normal driving.
1 (first)	Use this position when strong braking effect is needed on a steep gradient, below 60 km/h. Remember to move the lever back to drive position so that the transmission again upshifts into higher gears. Even though the T-bar may be in 1, the transmission does not select first gear until car speed is less that 55 km/h. Take extreme care when selecting 1 if towing a trailer or caravan on a steep incline. Even though the T-bar may be in 1, the transmission upshifts automatically to second gear at about 5,400 rpm.

MANUAL TRANSMISSION

The shift pattern illustrated, is also found on the top of the gear shift lever.

When selecting REVERSE gear you must shift the gear lever sideways against spring pressure in order to pass into the gear.



Shift speeds

The chart shows the recommended change speeds at which gear changes should be made for normal driving. Using shift speeds in the "economy" category will assist in maximising fuel economy.

Upshifting at road speeds will be necessary according to varying driving conditions such as load, road gradient, during overtaking and when other than light acceleration is required.

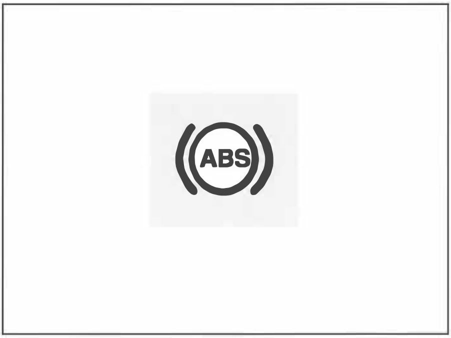
Manual transmission change speeds (km/h)				
Gear change	V6 engine		V8 engine	
	Economy	Normal	Economy	Normal
1st~2nd	15	25	15	25
2nd~3rd	25	45	25	35
3rd~4th	40	60	35	48
4th~5th	55	85	50	65
5th~6th	N/A	N/A	70	80

Operating notes

- When shifting from one gear to another, be sure to depress the clutch pedal fully to avoid clashing and possible chipping of the transmission gears.
- Never attempt to engage reverse gear until the car has completely stopped. A slight pause between depressing the clutch pedal and moving into reverse gear is desirable to allow all the rotating components to stop and avoid gear clashing. Whenever reverse gear is selected with the ignition ON, the reversing lights operate.
- Shift the gear lever with a moderate effort to allow time for the transmission synchromesh to work properly.
- To avoid damage to the clutch, do not drive with your foot resting on the clutch pedal.
- When stopped on an incline do not hold the car by slipping the clutch. Use the park brake or foot brake.
- When climbing steep grades, change down to a lower gear before the engine starts to labour. To maintain safe speeds on a steep downgrade and to reduce brake wear and overheating, shift into a lower gear before starting the descent.
- Do not over speed the engine when shifting down to a lowest gear.
- 4th gear provides direct drive and 5th gear, overdrive.

A.B.S.

ABS (Anti-lock Brake System) is in addition to your car's normal brake system. It prevents the wheels from locking up when braking, irrespective of the road conditions and tyre grip. It starts to regulate the braking as soon as a wheel shows a tendency to lock. The car remains steerable, even in the event of panic braking, for instance on bends or when swerving to avoid an obstacle.



Maximum braking is provided for each wheel, up to the point where it would lock. This means that steering control is retained.

In an emergency braking situation, the driver should keep full force on the brake pedal, without 'pumping' the brake pedal. 'Pumping' the brake pedal can reduce brake efficiency when ABS is controlling the braking.

DO NOT let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style. Your speed should always be adjusted to suit road and traffic conditions.

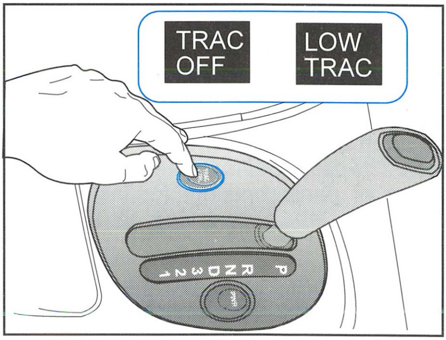
An ABS OFF warning light is provided in the gauges. To check that the bulb is working, the light comes on for a few seconds when the ignition is turned on. If this symbol is displayed when driving a malfunction of the ABS system is indicated. Remember, however, that this only means that the ABS's 'no lock' assistance is not operating, your car's conventional brake system still operates normally.

When your car is in a critical braking condition ABS makes itself noticeable through pulsing of the brake pedal and the noise of the regulation process, thereby reminding you to match your speed to the road conditions, even though it is keeping control of the braking.

The ABS system performs a self check each time the car is driven. This can sometimes be heard as well as felt, as pulsing, through the brake pedal.

TRACTION CONTROL (if fitted)

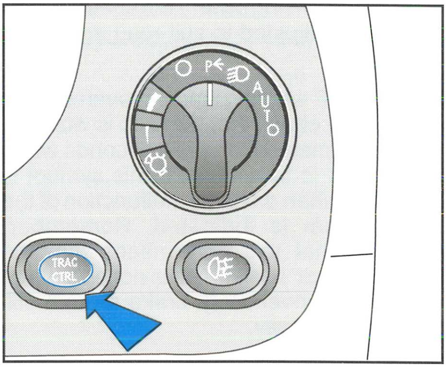
Traction control helps prevents the driving wheels from spinning. As soon as even one driving wheel starts to spin traction control reduces the power from the engine and applies the brakes, as necessary. This improves the car's stability, particularly on snow and ice, as well as on wet or slippery roads.



With automatic transmission

The LOW TRAC light on the instrument panel flashes when traction control is controlling wheel spin, indicating that the car is now in a critical situation. In addition, if the car has a V8 engine, traction control, when activated, provides feedback to the driver by pulsing the accelerator pedal.

Traction control helps you to keep control of the car and reminds you to match your speed to the road conditions. Do not, however, let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.



With manual transmission

Traction control is automatically turned on whenever the ignition is turned from off to on. To check that the bulbs are working the TRAC OFF and LOW TRAC lights on the instrument panel light up for a few seconds when the ignition is switched on. Pressing the TRAC CTRL button switches the system off, pressing the button again switches the system on. If the TRAC OFF warning light does not light up when the button is pressed, or if it comes on during driving, a fault is indicated in the system and traction control is no longer operational. You should contact your Holden Dealer.

Cars with automatic transmissions will have the TRAC CTRL button located on the centre console. Cars with manual transmissions will have the TRAC CTRL button fitted on the dash, near the light switch.

TRACTION CONTROL (if fitted) cont.

In certain circumstances where slippage of the driving wheels is desired, it may be helpful to disable the traction control system. For example, in some circumstances, particularly on steep gravel inclines, or if the car is bogged, it may be possible to get more traction from a slightly spinning wheel. **In addition, whenever snow chains are fitted, the traction control system should be turned off.** This is achieved by pressing the TRAC CTRL button. The TRAC OFF warning light then lights up to show that traction control is no longer operational. The system can be switched on again by pressing the TRAC CTRL, or when the ignition is next turned on.

CAUTION WITH V6 ENGINE ONLY:

The traction control system can take up to 3 minutes to warm up if the outside temperature is low and the engine is cold.

On cold days the traction control system initially provides braking to reduce wheel spin. As soon as the engine starts to warm up the traction control system also reduces engine power if the wheels start to spin. The colder the day the longer this will take.

Owners should use caution when starting a car in cold conditions and on road surfaces that offer poor traction, e.g., starting the car on a cold morning and driving on a slippery surface.

WARNING:

LPG and Traction Control are incompatible. If the car is fitted with a Holden approved LPG system, by Holden or by a Holden authorised LPG fitter then Traction Control will automatically be switched off when the car is running on LPG, indicated by the TRAC OFF light on the instrument panel illuminating.

DRIVING PRECAUTIONS

"Running in"

These days, there's no need to follow a formal running-in schedule. However, by observing a few simple precautions during the first few hundred kilometres of driving you will greatly assist your car's future performance and economy.

For the first 500 kilometres avoid using heavy acceleration.

Up to 1,500 kilometres avoid driving at any one speed - either slow or fast - for any length of time. Therefore, avoid using the cruise control (if fitted) while "running-in". However, include some higher speeds during this period. Always drive at moderate speed until the engine has completely warmed up.

It is best to drive your new car for 1,500 km before towing a load. If you must tow before this do not exceed 80 km/h. The same applies if you have a new or reconditioned engine, transmission or rear axle.

Engine misfire warning

Reduce speed and do not tow a caravan or trailer until the misfiring is corrected at the nearest Holden Dealer. Otherwise, the catalytic converter and exhaust system may overheat, resulting in car damage.

Brakes

- The power assisted brakes fitted to your car use vacuum from the engine when it is running. Therefore, never let the car run down hills with the engine off, or coast after switching the engine off.
- Your seat should be positioned so that you can push the brake pedal easily. Nothing should be under the brake pedal which could limit pedal travel, for instance, poorly fitting floor mats.
- Consistent, heavy use will shorten the life of the brake pads.

Power steering

The power assisted steering fitted to your car has been designed to reduce steering effort. Care should be taken not to hold the steering wheel fully turned when stationary (i.e., when waiting before turning a corner, etc.) as this creates high operating temperatures and pressures within the system.

If power assistance for the steering isn't working, due to the engine stalling etc., the car can still be steered. However, due to the much greater effort required to steer, it is recommended that you have the problem fixed promptly.

Loose articles

Do not leave loose articles or luggage in the passenger compartment. Whenever possible, stow articles in the luggage compartment. For wagons, loads stowed in the luggage area should be firmly secured.

DRIVING PRECAUTION cont.

Mobile phones and CB radios

Mobile phones and CB radio equipment, which use an integrated antenna, may temporarily affect the car's electronics (permanent damage is unlikely) when used inside the car, due to the interference created when transmitting.

Therefore, mobile phones and CB equipment that use an antenna fitted to the outside of the car should be used whenever possible, also refer page 1-30.

If phones or CBs with an integrated antenna *must* be used inside the car, avoid using near the dashboard area, as some functions may be affected.

Water crossing

Before crossing water it is recommended that air conditioning be switched off.

Crossing deep water could damage the engine. It is recommended that the water depth be no more than 175 mm and speed be limited to a walking pace. Brakes may then need drying out: lightly apply the brakes while maintaining a slow forward speed, with a clear area ahead, until brake performance returns to normal.

Tyre grip

A decrease in tyre grip occurs when water, snow, ice, gravel or other materials are on the road. Driving speed should be adjusted to the road conditions.

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as hydroplaning, may cause partial or complete loss of grip, which affects steering and braking. To reduce the possibility of hydroplaning:

- Reduce speeds during rainstorms.
- Replace tyres when tread wear indicators are visible.
- Regularly check that tyres are properly inflated.

ADD ON EQUIPMENT

Snow chains

Due to lack of clearance, snow chains cannot be fitted to wheel/tyre configurations built with S models, SS models or V8 Berlina wagons. If these cars needs to be driven in the snow, the owner should consider changing to the following wheel/tyre configurations:

P205/65R15	95H	15 x 6	(for V6 engines only)
215/60R16	95V	16 x 7	(for V8 and V6 engines)

Snow chains should be fitted only on the rear (drive) wheels.

Depending on design, large hub caps may contact parts of the chain. If so, remove the hub caps. Any valve extensions should also be removed.

Snow chains may only be used at speeds up to 50 km/h. Snow chains should only be used for short distances if the roads are not snow covered. The hard road surface causes rapid wear and the chain may break.

Snow chains links should not be thicker than 13mm and the clasp should be well away from sheet metal. Thicker chains may damage the car body.

Ensure that tyre pressures are as recommended on the tyre placard.

Mud flaps

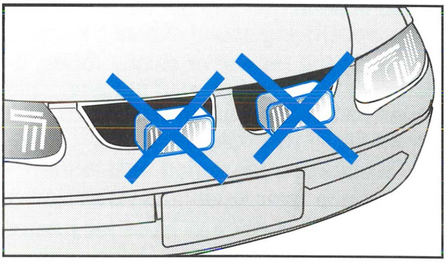
Mud flaps should be fitted if the car is driven extensively on unsealed roads.

CAUTION: Care should be taken when reversing to avoid trapping a mudflap between a tyre and a gutter.

Fitting driving lights, insect screens

When fitting these accessories be careful not to restrict air flow otherwise engine overheating and/or poor air conditioning performance may result.

Nothing should be fitted over the upper or lower air intakes at the front of the car, as this could affect engine cooling.



Fitting roo bars

If a roo bar is to be fitted, it is critical that the Holden approved roo bar be used. Other types must not be fitted. The Holden roo bar is available from your Holden Dealer, and has been compatibility tested with the car's design, including the Holden air bag system.

Fitting other types of roo bars may affect crash performance, air bag performance and engine cooling.

Roo bars should not be fitted to cars operating in suburban areas, as they increase the risk of injury to a pedestrian in the event of a collision. Roo bars are only recommended for country/outback areas, where additional protection from straying animals is required. Please remember that defensive driving and limiting driving speed to the road conditions is always the best approach, particularly where road side signs indicate wildlife is abundant.

NOTES

CHAPTER 5

Fuel

Page

5-2 Carbon monoxide caution
5-3 Petrol filling
5-3 Fuel Tank capacity
5-4 Emission Control
5-5 Reducing fuel consumption
5-6 Measuring fuel consumption

If car converted to gas refer separate LPG supplement in glovebox.

Warning: Cars fitted with a supercharger should never be converted to LPG.

PETROL

EXHAUST WARNING - CARBON MONOXIDE POISONING

Exhaust gases can produce carbon monoxide, a dangerous gas, which can cause unconsciousness and even death to both humans and animals.

You could inhale the gases if the exhaust system on your car is faulty.

To protect against exhaust gases entering the car, the exhaust system and body should be inspected:

- each time the car is serviced,
- whenever a change is noticed in the sound of the exhaust system,
- whenever the exhaust system, underbody or rear of the car is damaged.

Take the car to your Holden Dealer if you think your car needs inspecting for any of the above reasons.

DO NOT SIT (OR LEAVE CHILDREN OR PETS) IN A PARKED CAR FOR ANY EXTENDED PERIOD OF TIME WITH THE ENGINE RUNNING. DO NOT RUN THE ENGINE IN AN ENCLOSED AREA (SUCH AS THE GARAGE) ANY LONGER THAN IS NEEDED TO MOVE THE CAR.

Driving with the boot or tailgate open is not recommended. If you must travel with the boot or tailgate open, close all windows, ensure that the heater controls are set to outside (rather than re-circulate) with air directed to the face and the fan on the highest speed. Do not exceed 50 km/h unless necessary.

PETROL CAUTION:

- Petrol is extremely flammable and highly explosive.
- Always turn off the engine of your car and any mobile phones when refuelling.
- Do not smoke or allow open flames or sparks near the car when refuelling.
- If petrol fumes are smelt while driving, the cause should be found and corrected without delay.

Petrol - general

The use of any fuel, other than the fuel specified on the following page, may seriously damage the engine of your car and may void your Warranty. Only clean petrol of good quality should be used.

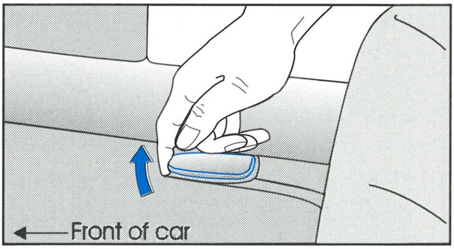
Petrol tanks should always be filled at the intermediate or fast fill rate. Don't add any more petrol after the petrol filler first clicks off or petrol blows back - as this allows room for the petrol to expand inside the tank.

It is only permissible to "trickle fill" petrol tanks when the car is to be driven for more than 50 km straight after the tank is filled. However, this is not recommended on days over 30°C.

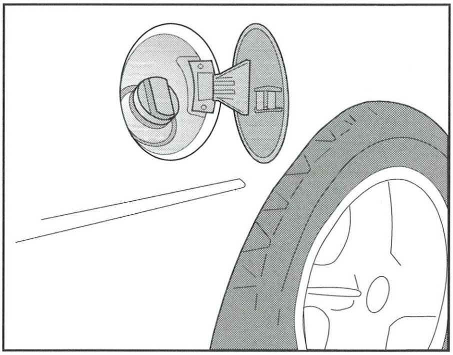
Wipe off any overflowing petrol immediately from the car; spray or splash with water (close the fuel opening before spraying with water).

PETROL cont.

Pull up the release lever on the floor (to the right of the driver's seat) to release the petrol flap.



The petrol cap (under the petrol flap) is a screw-on, ratchet type. After refilling, tighten the cap clockwise until a clicking noise is heard and then close the petrol flap.



Tank capacity

Both sedans and wagons have 75 litre fuel tanks.

Supercharged engines

The supercharged engine is designed to run most efficiently, for performance and fuel consumption, on premium (95 octane) UNLEADED petrol. However, it will perform satisfactorily on regular (91 octane) UNLEADED petrol.

Warning: Cars fitted with a supercharger should never be converted to LPG.

Non - supercharged engines

Use UNLEADED PETROL of 91 octane rating, or higher. High octane unleaded petrol ("Premium" etc.) may be used, but is not required by your car.

EMISSION CONTROL

Your car is fitted with emission control systems which are designed to reduce the amount of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) that are emitted from the engine and fuel system into the atmosphere. Hydrocarbons and oxides of nitrogen, when exposed to sunlight under certain conditions, contribute to photochemical smog. In addition, carbon monoxide is toxic when it becomes highly concentrated in the air.

The three major emission control systems fitted to your car are:

1. **Evaporative Emission Control System** (Australian Cars Only)

   This system is designed to prevent the escape of fuel vapour from the fuel system and recycle them through the normal combustion process.

2. **Crankcase Emission Control System**

   This system is designed to prevent blow-by gases from escaping into the atmosphere and recycle them through the combustion process.

3. **Exhaust Emission Control System**

   The various components of this system operate collectively to limit HC, CO and NOx emissions in the exhaust gas. The exhaust Emission Control System is comprised of components including electronic control of spark, fuel and idle speed. In addition, Australian cars have a catalytic converter and closed loop mixture control system.

For detailed information on the operation, servicing and repair procedures for these systems, refer to your car's service manual and/or the emission label inside the engine compartment of your car.

Owner responsibility

Cars sold and serviced within Australia have been designed to comply with Australian Design Rules and State Regulation emission requirements.

The engine or exhaust system of the car must NOT be modified in any way. Any change to the design may increase the emissions or otherwise defeat the intent of the regulations.

Any person who removes, modifies or hinders any part of the emission control system may be contravening Australian Design Rules, refer A.D.R. 28/01 (External Noise for Motor Vehicles) and A.D.R. 37/01 (Emission Control for Light Vehicles). It is also illegal to drive a car modified in this way.

Maintenance requirements

To ensure continuing compliance with the regulations you must maintain your car's emission control system as per your car's service manual, at the frequency shown in the Maintenance schedule in Chapter 12.

It is recommended that the necessary servicing be performed by an authorised Holden Dealer who has the specialised servicing equipment and trained personnel available to ensure that the adjustments and services specified are carried out.

REDUCING FUEL CONSUMPTION

Engine

Maintain the engine in peak mechanical condition by having it serviced regularly in accordance with the Maintenance schedule, in Chapter 12. This will ensure items such as the spark plugs, air cleaner, engine idle speed etc. are maintained for minimum fuel usage and peak engine performance.

Tyre pressure

Keep the tyres at the recommended pressures. Under-inflated tyres create extra rolling resistance which contributes to increased fuel consumption, refer Chapter 7.

Incorrect tyre pressures can also cause uneven and premature tyre wear.

Wheel alignment

Maintain correct front wheel alignment. Incorrect alignment makes the front wheels drag, which increases fuel consumption and causes uneven and premature tyre wear.

Warm ups and idling

Avoid long engine warm ups. They are unnecessary and waste fuel. An engine takes approximately five minutes to reach its efficient operating temperature and it does this most effectively when driving.

You should also avoid long engine idling. If your have to wait for more than a couple of minutes turn off the engine to conserve fuel.

Accelerating, driving and braking

Accelerate gently - avoid rapid starts, sudden bursts of speed and full throttle acceleration - they're certain fuel wasters.

Drive the car at steady speeds where possible (after run-in). It is desirable to reach top gear as soon as possible, but under no circumstances should you force the engine to labour in top gear.

Riding the brake

Do not rest your foot on the brake pedal when you do not intend to brake, as this can overheat the brakes, increase brake pad wear, damage the brakes and waste fuel.

Air conditioning

Turn off the air conditioning when not required. However, once every two weeks, with the engine running, switch the air conditioner on for 5 to 10 minutes to lubricate seals (even in Winter).

MEASURING FUEL CONSUMPTION

Before checking

- Fuel consumption should not be judged until the engine has been "run-in". You should wait at least 1,500 km before checking fuel consumption.
- Please read information on the preceding page regarding fuel consumption.
- Find a petrol station and petrol pump that will be convenient to use for the next few tank fills. This is necessary due to variations in pumping speeds between petrol pumps and petrol stations.

To check fuel consumption

1. Reset the tripmeter in the trip computer to zero. Refer Chapter 1 if unsure how.
2. Fill the fuel tank until the petrol pump first clicks off.
3. At the time of the next refill return to the same petrol station and petrol pump.
4. Record the distance travelled on the tripmeter and again reset the tripmeter to zero.
5. Fill the fuel tank until the petrol pump first clicks off.
6. Record the amount of petrol added to the tank from the petrol pump.

Calculating

1. Multiply the amount of petrol by 100, then divide the result by the kilometres driven.

   The answer is the "litres per 100 kilometres" consumption rate.

   e.g. 43.8 litres used, 476.3 km driven: $\frac{43.8 \times 100}{476.3}$ = 9.2 litres per 100 km

2. Repeat this procedure three to five times, to get an average reading. This will take account of variables such as load, weather conditions and city/highway driving.

CHAPTER 6

Emergencies

Page

6-2 Accident
6-3 Medical assistance
6-4 Flat tyre
6-10 Towing a disabled car
6-10 Hazard warning flashers
6-11 Fuses
6-12 Engine overheating
6-14 Flat battery
6-16 Air bag (if fitted)
6-19 6 cylinder engine belt
6-20 Bulb replacement

Your new car is covered for 3 years by 24 hour Roadside Assistance, refer Chapter 9.

ACCIDENTS

All drivers are advised to learn what to do at the scene of an accident, particularly where people are injured. Injured people can choke to death if their air passages are not cleared, they can bleed to death unless the bleeding is stopped, they may require mouth-to-mouth resuscitation or may have to be moved, even though badly injured. It is important that you understand how to avoid further damaging an injured neck or back or other broken limbs. In all cases, ensure safety for rescuers, victims and bystanders.

The following notes may help.

Accident - being involved

Stop immediately and remember to turn off the engine and apply the park brake.

Remember that time is vital. Remain calm and alert. Think quickly and clearly.

Give all possible assistance to all injured persons (see following page).

Send for police and ambulance if anyone has been injured. Give information as accurately as possible: the exact location, the number of injured people and a brief report on the overall situation.

Warn all other traffic approaching the scene. Turn off ignition switches. Stop any smoking near spilt petrol. In darkness, try and light up the area to warn others, using a torch or headlights (do not use flammable items).

Clear the road of accident debris.

Exchange your name, address, car registration, owner's name and address with the other parties involved in the accident.

If damage to property only has occurred, report the facts to the owner of the damaged property or to his/her representative, to any police present at the scene or to the nearest Police Station.

Try to note all important facts because such details may be important if needed later.

Accident - being a witness

If you witness a road accident or it becomes your task to stop and help:

- Keep in mind that an observant witness can prove most helpful. Some day you yourself might be very glad of help from a witness.
- DO NOT stop at the scene of an accident just to be a spectator. If other people are already in attendance and giving assistance, you should stop only if you can contribute assistance.
- Give what assistance you can to any injured persons (see following page).

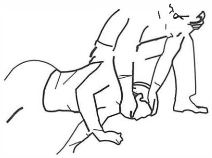
ACCIDENTS cont.

Part 3. Medical assistance

This information is basic first aid information which is intended as a guide only and may not be applicable in all situations. You should always defer to a trained medical officer or other person with first aid knowledge. Protective equipment, such as rubber gloves are recommended.

Keep calm and think clearly. Your experience may not be much but do your best.

- Look after the unconscious person first. Check airway, breathing and circulation. If no breathing, then check if air passages are clear, i.e. nose and mouth. Use your fingers to clear air passages if necessary. If the air way is clear then mouth-to-mouth resuscitation may be needed at once.
- You must be very careful when moving an injured person. It is best not to move at all, except if in danger, as serious and permanent damage can be done to an injured neck or back if not supported during movement. AVOID BENDING OR TWISTING A NECK OR BACK. KEEP THEM STRAIGHT. All injured limbs require support when an injured person has to be moved.



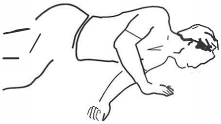
Unconscious people can choke.

Carefully turn to one side.

Tilt the head back slightly.

Wipe out the mouth with your finger to remove blood, vomit, broken teeth or dentures.

- Provided it is not dangerous to do so because of other injuries, an unconscious person will do best in the position illustrated here.



Lay the person on one side. If it will not aggravate any injuries then:

Bend the uppermost knee until the thigh is at right angle to the body.

Bend the uppermost arm and elbow so that the hand lies near the face.

Gently pull the underneath arm so that it rests straight on the ground free of any body weight.

- Try to stop bleeding by applying direct pressure, using your hand, or by pressing torn flesh together. Use any clean cloth available. Fold cloths to make pads. If necessary press one pad on top of another. Keep pressure around edges of a wound BUT NEVER USE A TOURNIQUET.
- Shock may be treated by reassurance, relieving pain, controlling any bleeding and keeping the injured person warm but not hot. It is best not to give any fluids and NEVER ALCOHOL.
- If the injured person is in danger and has to be moved, try and have three or four people help and concentrate on not bending or twisting the neck, spine and injured limbs. Keeping the neck and spine straight is most important.

FLAT TYRE

CAUTION:

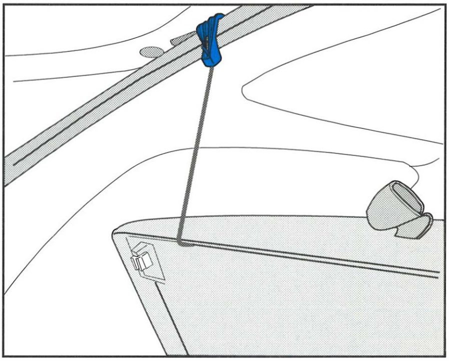
- Use the jack only for lifting the car when changing wheels.
- Never get beneath the car when it is only supported by the jack.
- Do not start or run the engine while the car is only supported by the jack.
- All passengers should be out of the car when it is being jacked.
- Use the car's jack only at the designated lifting points. Use in other locations can damage the car.
- If using a jack (or hoist) other than the jack supplied with the car, refer to the last page in Chapter 7 for the lifting positions.
- The car should only be jacked on hard, level surfaces.

1. Park on a level surface and set the park brake firmly.

2. Remove the ignition key and place manual transmissions in REVERSE gear or automatic transmissions in PARK.

3. Remove the spare wheel, jack and combination jack handle/wheel wrench. Instructions for removing these parts from a wagon model are shown on the facing page, information for a sedan model is shown over the page.

FLAT TYRE cont.



Wagons:

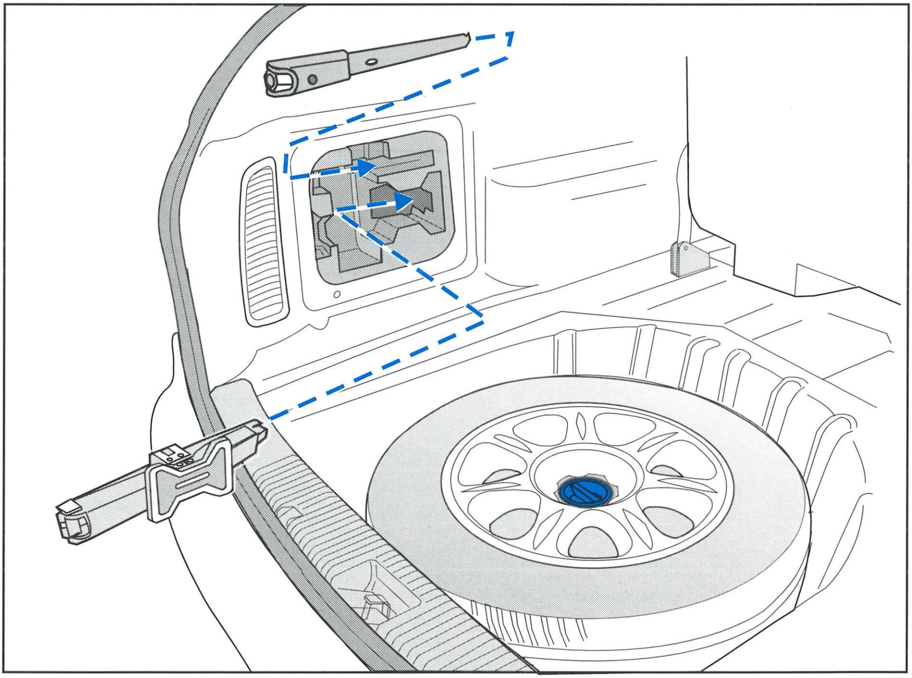
Open the tailgate. A finger loop is provided on the centre rear edge of the floor cover. Use the loop to pull up the cover, which can then be secured out of your way with a hook. The hook is provided underneath the cover. Unclip the hook and attach it to the weather-seal. *Remember to unhook the cover before closing the tailgate.*

Undo the nut in the centre of the wheel anti-clockwise and lift the spare wheel out of the car.

To remove the jack and combination jack handle/wheel wrench, pull down the cover on the left hand side of the car.

The jack is held in place by clips. Pull the clips upwards and downwards and remove the jack.

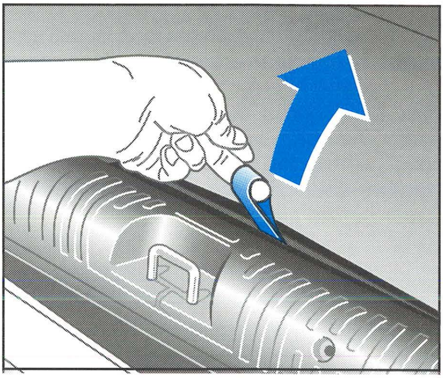
The combination jack handle/wheel wrench is also held in place by clips. Pull the clip rearwards to release.



FLAT TYRE cont.

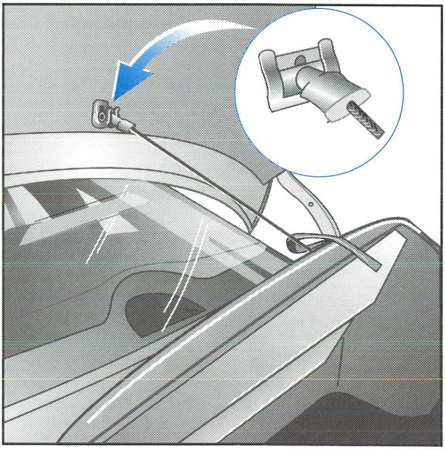
Sedans:

Use the finger loop to pull up the spare wheel cover.



The spare wheel cover can be secured out of your way. An extendable strap is provided in the centre of the rear edge of the spare wheel cover. Pull up the T-piece and attach it to the boot, as shown.

Remember to unhook the strap before closing the boot.

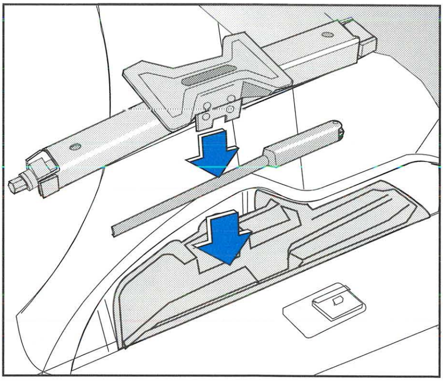


Undo the nut in the centre of the spare wheel anti-clockwise and lift the wheel out of the car.

The tools are stored in a compartment in the floor, also under the spare wheel cover.

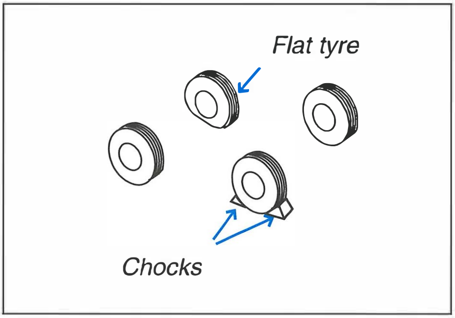
The jack pulls out (there are no clips holding it in).

The combination jack handle/wheel wrench is stored under the jack. It also just pulls out.



FLAT TYRE cont.

4. Block the wheel diagonally opposite the flat tyre with a solid object.



5. If wheel trim covers wheel nuts, remove as follows:

   If **individual wheel nut caps** fitted, remove the individual wheel nut caps, covering the wheel nuts. The jack handle can help by placing the sharp end in the slot of the wheel nut cap and sliding off the cap.

   Where **full wheel trim** fitted, remove the trim by inserting the handle end of the wheel wrench tool between the wheel and the wheel trim. Working around the wheel, gently and evenly lever off the wheel trim.

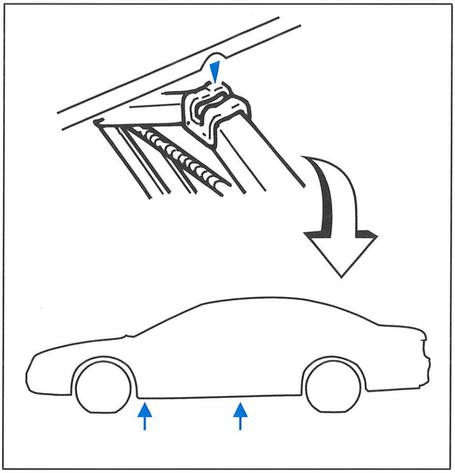
6. Loosen, but do not remove, wheel nuts by turning wheel wrench anti-clockwise.

7. Place the jack below the jack location closest to the wheel being changed.

   There are four jack locations, two each side of the car. The jack locations (blue arrows in the illustration) are marked by half circle cut outs on the car.

   The rear jack location is half way along the car for both sedans and wagons.

   Always read the label on the jack.



CAUTION: Failure to position the jack as described above could cause the car to slip off the jack

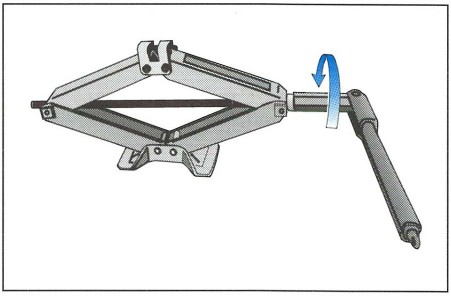
FLAT TYRE cont.

8. Raise the jack to fit the “U” shaped lifting foot of the jack around the car body, at the jack location.

Ensure that the jack is not tilted and that the base is resting squarely on the ground.

Turn clockwise to raise, anti-clockwise to lower.

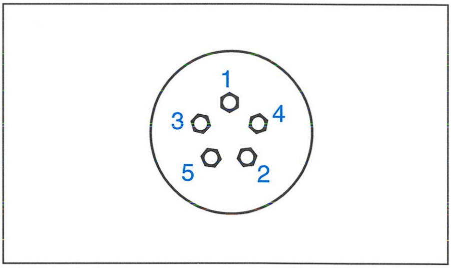
The jack handle must be *unfolded* into a right angle to use.



9. Raise the car until the tyre is clear of the ground. Remove the wheel nuts and place (together) in a dry spot to avoid getting dirt in the threads. Exchange the wheel on the car with the spare wheel.

Note: You may wish to change the wheel's centre cap onto the wheel being put on the car. Remove the centre cap from the wheel that has the flat tyre by gently punching it out from the back of the wheel. Push it onto the spare wheel, now on the car.

10. Replace the wheel nuts and tighten by hand. Then, with the wheel wrench, lightly tighten in the sequence shown.



11. Lower the car completely and remove the jack.

12. Fully tighten the wheel nuts with the wheel wrench in the sequence shown.

13. Replace any wheel trim which covers wheel nuts, as follows:

Note that each type of wheel trim fits in a specific position on the wheel. If incorrectly placed the trim will not sit "flush" and, if forced, may damage the wheel.

- If **full wheel trim** fitted, locate the valve in the valve hole provided in the wheel trim. Working around the wheel trim, use several light blows with the palm of your hand to push on the wheel trim. It may be necessary to protect the hand during this operation.
- Where **individual wheel nut caps** are fitted, replace caps on each nut.

FLAT TYRE cont.

14. Stow all tools and flat tyre as shown on earlier pages.

Notes:

- When re-installing the jack, insert the nut end in first. On sedans, the nut end points towards the rear of the car; on wagons, the nut end points towards the front of the car.
- Remember to unhook the spare wheel cover before closing the boot/tailgate.
- To reduce movement of the spare wheel in the load area, the centre nut should be tightened to between 2 to 3 Newton metres (very tight "finger" tight). The spare wheel should also be flat and centralised in position.

15. Remember to get the tyre repaired as soon as possible.

CAUTION:

As soon as possible after changing a wheel, you should have the wheel nuts tightened with a torque wrench to between 100 and 125 Newton metres. Wheel nuts should be tightened evenly to the correct torque in the sequence shown, as wheel nuts which have not been tightened properly could eventually allow the wheel to come off while the car is moving!

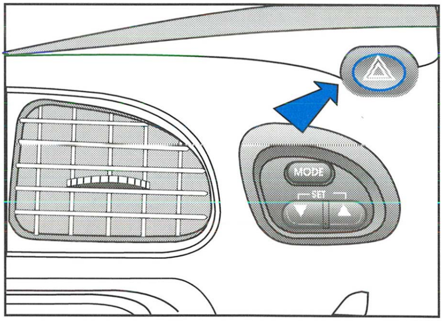
TOWING A DISABLED CAR

Towing a disabled car

Proper lifting or towing equipment is necessary when lifting or towing the car to prevent damage. Country, State and Local laws must be followed. In an emergency, your car may be towed on all four wheels in the following manner:

- Fit the towing equipment to the holes at the side of the front cross member. Use of two hooks with the load evenly spread, rather than one, is recommended. Do not attach to the bumpers or brackets, suspension or cross members.
- Place transmission in neutral position and release the park brake.
- Switch the ignition key to "ACC" position. This will free the steering lock and allow the correct operation of windscreen wipers and turn signals.
- For the sake of safety and to prevent damage to the car it is advisable to avoid jerky movements and to drive slowly during towing operations.
- Remember that *power assist* for brakes and power steering are not available when the engine is off. The brakes and steering still function, but take greater effort.
- To prevent exhaust fumes from the towing car entering into the towed car, close the windows and move heating and ventilation controls to "re-circulate" position.
- Cars fitted with automatic transmissions must not be towed for more than 55 km or at over 55 km/h unless the propeller shaft is removed.
- Cars with damaged transmissions must not be towed unless the propeller shaft is removed.
- Only the driver should be in a towed car.

Hazard warning flasher



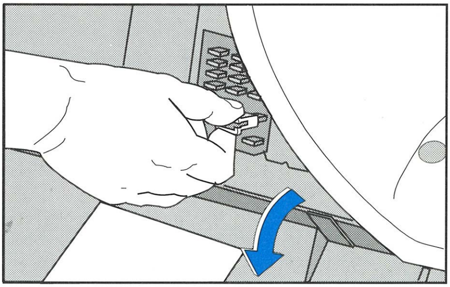
Press the switch to turn the hazard warning flasher on and off. The hazard warning flasher works regardless of the ignition position.

When turned on, all turn signals flash continuously.

Use the hazard warning flasher to warn other drivers any time your car becomes a traffic hazard, day or night.

Use of the hazard warning flashers while the car is moving is illegal in some States or Countries.

FUSES

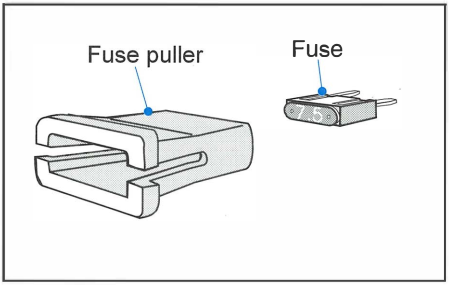


The main fuse panel is in the instrument panel, below the steering column.

Pull the hinged fuse panel down to reveal the fuses.

The separate, fuse/relay box is located in the engine compartment, marked "Fuses". Access to these fuses is gained by removing the snap-on cover.

Both covers have diagrams showing the layout of the fuses and the amperage rating.



To determine whether or not a fuse is “blown”, it is necessary to pull out the suspect fuse and examine the element in the fuse. A fuse puller is provided in the fuse panel, inside the car.

If the fuse has blown, replace with one of the same amperage, as stamped on the fuse head.

If a fuse blows twice in a row a fault is indicated. The cause should be promptly located and fixed.

Ensure that the fuse cover, either inside the car, or under the bonnet, is securely in place.

CAUTION: When replacing a fuse be sure to use a fuse of the specified amperage. Never install a wire or similar as it could damage electrical components and cause a fire.

ENGINE OVERHEATING

CAUTION:

Immediate action is required if the engine overheats. This can be indicated by the temperature gauge needle moving over to the "H", by steam escaping from under the bonnet, a loss of power or a loud knocking or pinging noise. Continued driving EVEN FOR A SHORT TIME could cause a fire or car damage.

Pull out of the traffic as soon as possible and stop the car. Leave the engine idling and the park brake applied while you get out and check that the cooling fan is working.

CAUTION:

Do not open the bonnet if you can see or hear steam or coolant escaping from the engine compartment. Wait until no steam or coolant can be seen or heard before opening the bonnet.

If the fan is working and the temperature gauge needle has not returned to its normal position within a few minutes STOP the engine and remove the ignition key. Look for leaks at the radiator hoses and connections, heater hoses and connections, radiator and water pump. Take care when checking these areas as they will probably still be hot.

If you find a major leak or other problems that may have caused the engine to overheat, do not run the engine until these problems have been corrected.

If you do not find anything wrong then you should check the engine coolant level, for V6 or V8 as appropriate.

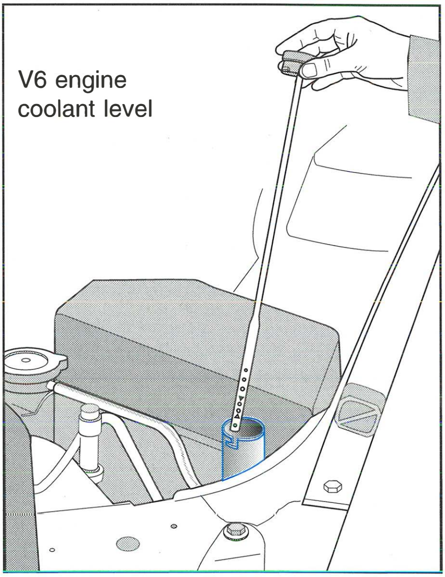
V6 engine:

Turn the coolant dipstick cap a quarter of a turn anti-clockwise and pull out the dipstick. When the engine is cold the coolant level should be at or above the *lower triangle* mark on the dipstick. After the car has been driven and the engine is at normal operating temperature, the level should be somewhere between half full and the *MAXIMUM* triangle mark. If the coolant level is correct, replace the dipstick and turn the cap a quarter of a turn clockwise to secure. If the level is too low, proceed as follows:

CAUTION:

Do not remove the radiator cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

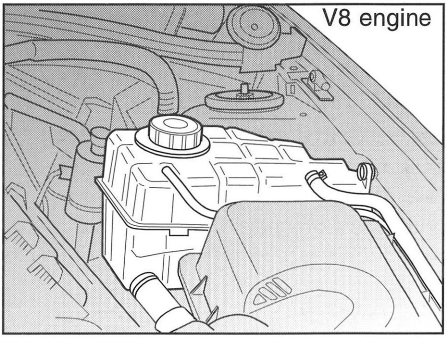
When the engine has cooled sufficiently, check the radiator level as follows.


V6 engine coolant level

Cover the radiator cap with a thick cloth and turn slowly anti-clockwise (without pressing down) until it reaches a “stop”. This is the pressure relief stop, which allows any remaining pressure (indicated by a hissing sound) to escape. Then press down on the cap and continue turning it anti-clockwise until it can be removed. Then remove the coolant dipstick. With the radiator cap OFF, top up the coolant dipstick tank if required. Remember to ensure the dipstick is secure after filling. Then, **WHILE THE ENGINE IS IDLING**, top up the radiator (if required) and replace the radiator cap.

ENGINE OVERHEATING cont.

V8 engines



When the engine is cold the coolant level should be at or slightly above the "COLD FILL" mark at the centre weld joint. After the car has been driven and the engine is at normal operating temperature the level should be between the centre weld joint and the cap. If the coolant level is correct, do not undo the cap.

If the level is too low, cover the cap with a thick cloth and slowly turn anti-clockwise. With the coolant cap OFF, top up the coolant tank if required **WHILE THE ENGINE IS IDLING** and replace the cap. Leave the engine idling for a few minutes while the level "settles".

Do not overfill, as coolant requires space to expand when warmed up.

All engines

If after taking one or more of the above actions the temperature gauge no longer signals an overheat condition you can resume driving at a reduced speed. Return to normal driving after ten minutes if the temperature gauge does not again show an overheat condition. If overheating occurs again you should have the car attended to, as soon as possible, by a qualified mechanic.

The engine may temporarily operate at high temperatures during demanding operating conditions, especially on hot days, including: climbing a long hill; stopping immediately after high speed driving; idling for long periods in traffic; towing a heavily laden trailer or caravan.

You should avoid driving for prolonged periods in any of the above conditions if the temperature gauge shows "hot". It may help to turn off the air conditioner in these conditions. Chapter 7 gives instructions to help protect your cooling system from overheating.

Air bleeding: all V6 engines (including supercharged)

These engines have bleeder vents to let any trapped air escape from the cooling system. Air bleeding should be done if a significant amount of coolant has been added, otherwise the engine may overheat. This is particularly important if the engine is supercharged, as these engines have **three** air bleed points.

It is recommended that air bleeding be done by your Holden Dealer, who has the most up-to-date technical information and equipment on the system. You should have the air bled **as soon as possible** on supercharged engines or they may be damaged due to overheating.

If you have to drive the car before the air bleeding is done, ensure the coolant level in the radiator is as high as possible. This involves constantly checking and topping up the level. It is recommended you reduce load on the power train, i.e., reduce driving speed, don't tow heavy loads or heavily load the car until the air is bled.

FLAT BATTERY

CAUTION: DO NOT "push start" or "tow start" your car, either manual or automatic. If unburnt fuel were to reach the catalytic converter and ignite, the converter could overheat or be destroyed by backfire. Therefore, if the battery is flat, you can "jump start", but not "push start" your car.

Please read the following procedure in full before attempting to jump start your car.

If after reading the following procedure you are still unsure about "jump starting" we strongly recommend for your safety and that of your car that you leave the starting to a competent mechanic.

Jump starting

CAUTION:

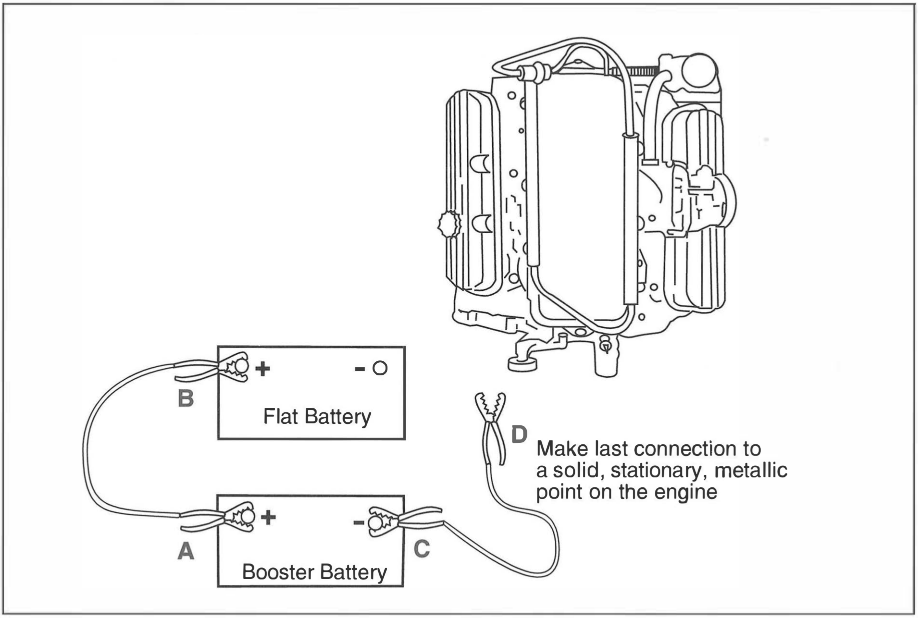
Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, when working near a battery:

- Do not use open flames or sparks near the battery.
- Do not smoke near a battery.
- Wear eye protection such as safety glasses and avoid leaning over the battery.
- Battery acid is corrosive. If it gets on your skin, wash with lots of water immediately. If it gets in your eyes you should not only wash with lots of water but should also seek medical help. Battery acid also damages paint and fabrics. To minimise damage, wash off immediately.
- Be sure any batteries that have filler caps are properly filled with fluid.
- Remove rings, metal watch bands and other metal jewellery before working around the battery.
- Never use a quick charger to start your engine.
- If you have a telephone fitted to your car, you should remove the fuse for the telephone before jump starting. Remember to reinstall the fuse afterwards.

1. The battery in your car has a negative earth and a 12 volt rating. The battery in the other car **MUST** also have a negative earth and a 12 volt rating. Remove any battery covers.
2. Position the two cars so that they are NOT touching, apply the park brakes, put automatic transmission in PARK, manuals in NEUTRAL. Turn ignition to LOCK and switch off all lights and accessories in both cars, except the hazard warning flasher or any lights needed for the work area.

FLAT BATTERY cont.

3. Attach one end of the RED jumper lead to the positive terminal of the booster battery (identified by a red colour, + or P) and the other end of the RED jumper lead to the positive terminal of the flat battery.


B
+
- O
Flat Battery
A
+
-
C
Booster Battery
D
Make last connection to a solid, stationary, metallic point on the engine

4. Attach one end of the BLACK jumper lead to the negative terminal of the booster battery (identified by a black colour, - or N) and the other end of the BLACK jumper lead to a solid stationary, metallic point on the engine of the car with the flat battery. DO NOT CONNECT DIRECTLY TO NEGATIVE TERMINAL OF THE BATTERY.

5. When making all connections take care that the jumper lead clamps do not touch each other. Also, ensure that jumper leads are not on or near pulleys, fans or other points that will move when the engine is started.

6. Start the engine in the car with the good battery and run the engine at a moderate speed. Then start the engine with the flat battery.

7. Leave the engines running while removing the jumper leads - in the exact reverse order they were installed. While removing each clamp, take care that it does not touch any other metal while the other end remains attached.

8. Replace any battery covers.

Note that your radio may require input of the PIN, refer Chapter 1.

AIR BAGS (if fitted)

Your car is fitted with a driver's air bag, stored inside the steering wheel ("SRS AIR BAG" is stamped on the steering wheel and a label is attached under the driver's sun visor).

Your car may also have a front passenger's air bag, stored in the dash panel. The fitment of a passenger's air bag is recognised by the wording "SRS AIR BAG" above the glovebox and a label attached under the passenger's sunvisor.

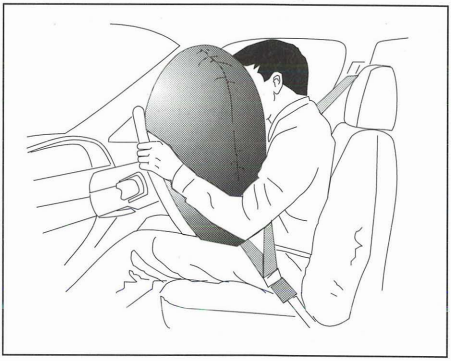
Some models also have side impact air bags, for the driver and front passenger, stored in the side of the seat backs closest to the door. If your car is fitted with side impact air bags there will be labels on both door lock pillars and on the outside of the car, see illustration.

If your car is fitted with two front air bags they operate as a pair - they are triggered simultaneously. Side air bags, however, are triggered independently.

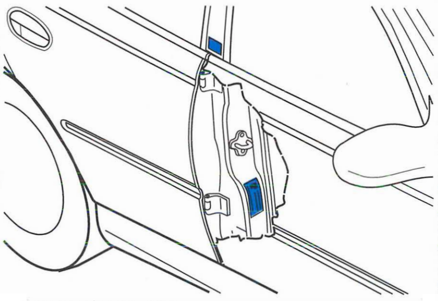
In a severe front end collision, both front air bags inflate, assisting seat belts to restrain forward body movement. A side impact air bag will only trigger on the side of the car that is struck.

When air bags inflate an operating noise may be heard and a small amount of smoke-like gas is released. The gas is harmless and does not indicate malfunction or fire. The air bag then deflates - the whole process *only taking a moment.*

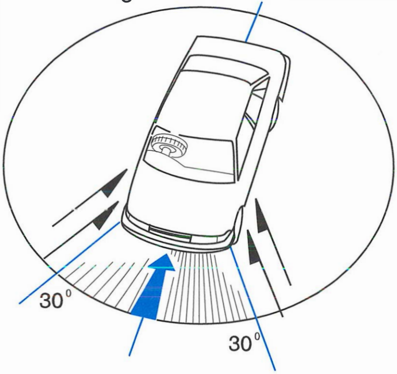
Air bags are part of the "Supplemental Restraint System" as they assist, but do not replace seat belts. Air bags are not designed to inflate if the car is hit from the rear or overturns. **Seat belts must be worn by all passengers whenever the car is moving.**



Side impact air bag labels
- on both sides of the car



Front air bags



Front air bags will inflate if car struck hard, in frontal or near frontal impacts. Front air bags will not inflate if car struck from side, rear, or in some rollovers....always wear a seat belt.

AIR BAGS (if fitted) cont.

Air bags inflate with great force. If you are too close to an inflating air bag it may cause injury. Seat belts help keep you in position for air bag inflation in the event of a collision.

Ten seconds after any air bag or seat belt pre-tensioner (refer Chapter 3) has inflated (and the car has stopped) your car will:

- unlock the doors,
- turn off the engine,
- turn off the fuel pump,
- and switch on the interior light

provided there is battery power.

Switch the ignition OFF and then ON if re-starting the engine is required.

A warning light on the instrument panel illuminates for a few seconds when the ignition is switched ON. This is to indicate that the air bags are operational. If the light *does not* show when the ignition is switched to ON, or if it illuminates when driving, you should contact your Holden Dealer immediately, as the air bags and seat belt pre-tensioners may not function correctly, especially in an accident.

The warning light will illuminate after an accident if a side air bag, seat belt pre-tensioners, or seat belt pre-tensioners and air bag(s), have activated.

After an accident in which the front air bag system was triggered, the air bag system (steering wheel, steering column, air bag, seat belt and control module) must be replaced. If a passenger's air bag is fitted, the air bag assembly, air bag cover, seat belt and the dash panel also need to be replaced. After side impact air bag deployment, the relevant seat, seat belt, sensor and control module require replacement. It is recommended that this work be done by a Holden Dealer.

AIR BAGS (if fitted) cont.

WARNINGS:

Front passenger's air bag: The dash board area must be kept clear. Do not place any objects over the dash board or between an air bag and yourself. Nothing should hang from the sun visor or mirror and a passenger must not rest their feet on the dash board.

Driver's air bag: The horn pad must not be covered with adhesive or any other material. The driver should adjust the seat as far back as possible and sit back as far as possible while still maintaining control of the car.

Side impact air bags: Do not fit unauthorised seat covers. Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door. Always sit centrally in the seat.

The system should also be inspected by a Holden Dealer if the dash board area or steering wheel is scratched, cracked or damaged, or, if side impact air bags are fitted, the front seats are damaged.

Extensive design and testing has gone into the Holden air bag system. It is extremely reliable and has little chance of accidental inflation. It should, however, be treated with respect. Any careless or unskilled interference with the system could lead to its failure or to accidental inflation. Any work to the electrical system, steering column, dash board area, steering wheel, front seats (if side impact air bags are fitted) or air bag system should *only* be carried out by an authorised Holden Dealer.

ROO BAR NOTE: Fitting a roo bar can change the impact speed which would normally cause the front air bags to inflate, reducing effectiveness and potentially increasing the risk of injury and repair cost. Please read the note on page 4-11.

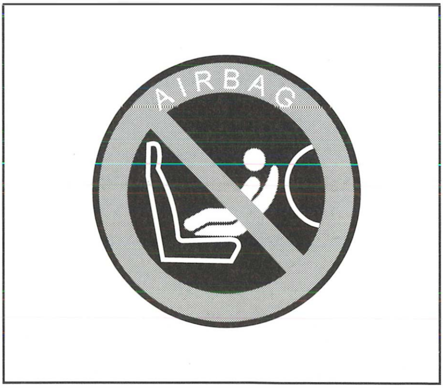
SIDE AIR BAG NOTE: The side impact air bags will deploy and offer protection in most, but not all, severe side impacts. Because of the limited time available to detect some side impacts, it is not possible to deploy the SIAB in all serious accidents (e.g. some pole impacts).

AIR BAG AND CHILD RESTRAINTS:

Extreme Hazard! Do not use a rearward facing child restraint on a seat protected by an air bag in front of it!

Do not use a child restraint on a seat fitted with a side impact air bag.

Please read the warning on page 3-8 if fitting a child restraint.

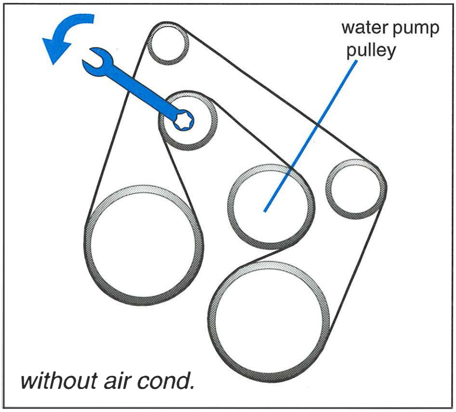


6 CYLINDER ENGINE BELT

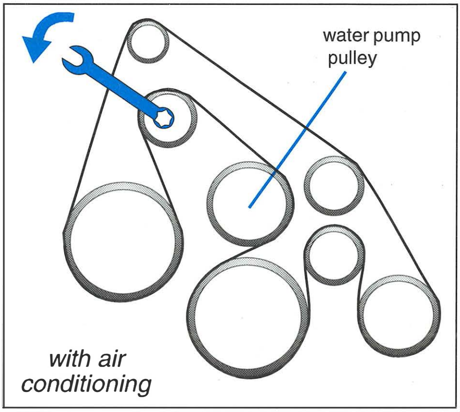
If the 6 cylinder engine accessory belt is broken, replacement is as follows:

1. Feed the belt over the pulleys as shown - except for the water pump pulley. Ensure the belt is correctly installed around the pulleys before proceeding.
2. Put a 15 mm ring spanner over the bolt in the centre of the pulley shown.
3. Move the spanner in the direction shown to release the tension on the belt.
4. Feed the belt around the water pump pulley, then slowly release and remove the spanner.
5. The belt automatically adjusts when the engine is started.

Removal of the belt is the same as replacement, that is, you must remove the tension on the belt with a spanner while removing the belt.



without air cond.



with air conditioning

Supercharged engines only

Two exterior belts are used; an accessory belt (see above) and a supercharger belt.

The supercharger belt is fitted *after* the accessory belt has been fitted.

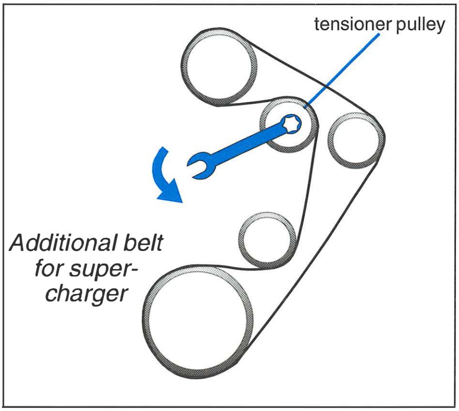
Feed the belt over the pulleys as shown, except for the tensioner pulley. Ensure the belt is correctly installed around the pulleys.

Put a 15 mm ring spanner over the bolt in the centre of the tensioner pulley. Move the spanner anti-clockwise to relieve belt tension.

Slip the belt over the tensioner pulley, then slowly release and remove the spanner.

The belt automatically adjusts when the engine is started.

Please note that these belts have been specially designed. A replacement belt must be specifically for the application, i.e. a supercharger belt must be used for the supercharged engine in the routing shown.



Additional belt for super-charger

BULB REPLACEMENT

When replacing, it is important to only fit bulbs of the specified wattage.

Front lights

To gain access if replacing a bulb on the driver's side: disconnect the battery terminals, remove the battery retaining plate and manoeuvre the battery out of the way. If the car has a V8 engine, the battery has to be removed from the car.

To gain access if replacing a bulb on the passenger's side with a V8 engine: the radiator cover has to be removed (4 screws) and the air snorkel pulled out.

After replacing the bulb on the driver's side: remember to replace and connect the battery and re-enter the radio PIN, refer Chapter 1.

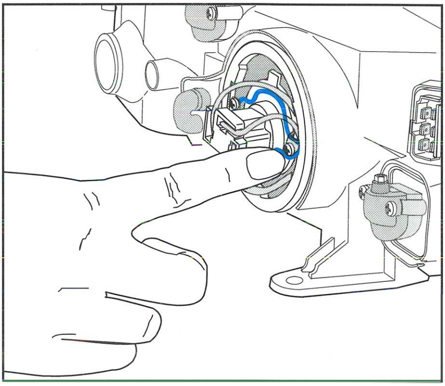
After replacing the bulb on the passenger's side with a V8 engine: remember to push the air snorkel back into place and refit the radiator cover (4 screws).

If unsure, please have the work carried out by a competent mechanic.

Headlights (60/55 watts)

Do not touch new bulbs or reflectors with bare hands. Greasy fingers cause stains which evaporate - eventually resulting in a dull reflector. Grease spots on Halogen bulbs will, within a short time, lead to bulb failures. Inadvertently stained bulbs may be cleaned with methylated spirits.

1. Open the bonnet. Refer "Front lights" above.
2. Turn the dust cap anti-clockwise and remove from rear of headlight assembly.
3. Pull off wiring harness connector from rear of bulb.
4. Unclip spring retainer (as shown) and pivot clear of bulb, then remove bulb.
5. Refit new bulb into place. The different size locating tangs on the bulb base only allow the bulb to seat correctly into the reflector in one position.
6. Refit spring retainer, wiring harness connector and dust cap (ensuring rubber seal is in place).
7. Refer "Front lights" above. Check light operation.

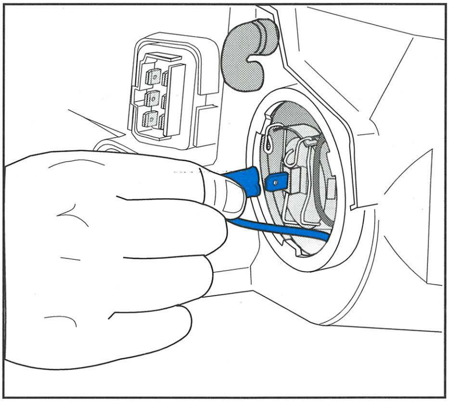


Front park lights (5 watts)

1. Open the bonnet. Refer "Front lights" above.
2. Turn the headlight rear dust cap anti-clockwise and remove.
3. Remove park light bulb holder (located next to headlight bulb) by pulling straight out. Alternatively, if access is difficult, first remove the headlight bulb, and then use the index finger to carefully push the bulb and holder from the park light socket.
4. Remove park light bulb by pulling straight out of holder.
5. Insert new bulb into holder, reinstall holder and dust cap (ensuring rubber seal is in place).
6. Refer "Front lights" above. Check light operation.

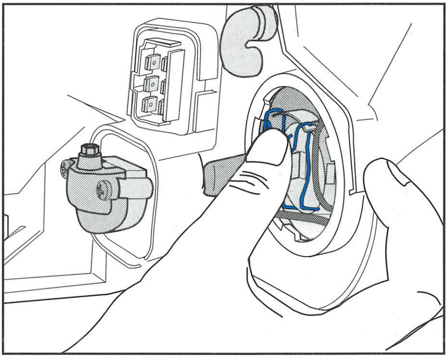
BULB REPLACEMENT cont.

Inboard high beam (55 watts)

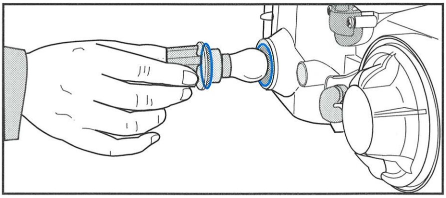


1. Open the bonnet. Refer "Front lights" on previous page.
2. Turn the high beam rear dust cap anti-clockwise and remove.
3. Disconnect bulb connector.
4. Depress and unclip spring clip at both sides.
5. Pull out bulb assembly.
6. Do not touch the new bulb with your fingers. If accidentally touched, wipe immediately with methylated spirits.

   Refit new bulb, ensuring that locating lugs on bulb fits into holes on bulb housing.
7. Reconnect spring clip at both sides.
8. Connect bulb electrical lead.
9. Replace dust cap (ensuring rubber seal is in place).
10. Refer "Front lights" on previous page. Check light operation.



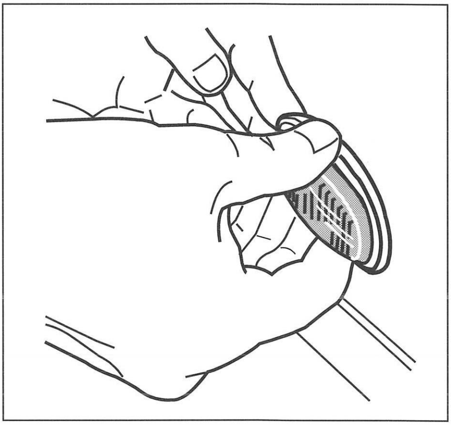
Front turn signal (21 watts)



1. Open the bonnet. Refer "Front lights" on previous page.
2. Turn bulb holder anti-clockwise and remove.
3. Lightly depress bulb and twist anti-clockwise out of the holder.
4. Insert new bulb and reinstall bulb holder. Note that the bulb should be coloured orange.
5. Refer "Front lights" on previous page. Check light operation.

BULB REPLACEMENT cont.

Side turn signal (5 watts)



Grasp the lens at the rear, push forwards and pull away from the car body. Separate the bulb holder from the lens assembly by first rotating the bulb holder anti-clockwise.

The bulb pulls straight out of the bulb holder. Insert new bulb into bulb holder. Install bulb holder into lens housing. Note that bulb holder only fits into lens housing one way. Therefore, keep turning bulb holder clockwise until it fits into place and can be tightened.

When re-inserting the light, first locate the front of the housing into the body before pushing the rear inwards.

Check light operation.

Sedan rear high stop light (18 watts)

From the boot, reach under the stop light and twist to remove the bulb holder.

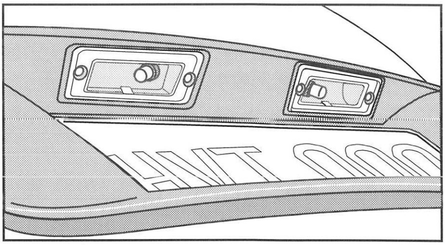
Bulb pulls straight out of bulb holder.

Install new bulb into bulb holder, refit bulb holder back into stop light.

Check light operation.

Note that if your sedan has a high stop lamp in the rear spoiler (SS models) it is recommended that bulb replacement be carried out by your Holden Dealer.

Berlina sedan and Calais number plate (5 watts)



Remove screws securing the lens and remove the lens.

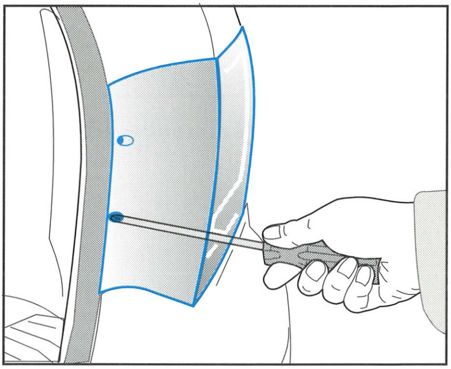
Pull the bulb from the holder.

Install the new bulb into the holder and refit the lens.

Check light operation.

BULB REPLACEMENT cont.

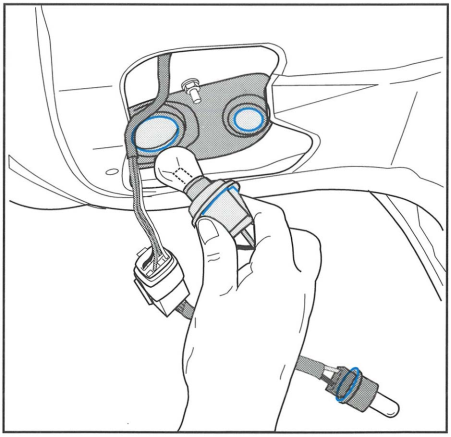
Sedan: rear turn signal (21 w), stop/tail (21/5 w), reverse (21w)



1. Open boot.
2. Remove the two screws attaching the rear quarter light assembly to the body.
3. Pull the rear quarter light assembly sideways out from the panel so that locating pegs on the side of the light assembly snap free from the clips. While holding the light assembly, turn and remove the appropriate bulb holder.
4. Remove bulb from holder by pushing in and turning.

   The turn signal bulb must have orange coloured glass.
5. Insert new bulb into bulb holder and refit bulb holder into light housing, ensuring that the holder locks securely in place.
6. Ensure that the rear quarter light clips are seated correctly. Fit the light housing to the body, ensuring that the locating pegs snap into the clips and install and tighten attaching nuts to the correct torque: 3 to 4 Nm.
7. Check rear light operation.

Sedan: Stop/tail - Berlina and Calais (21/5w)



1. Open boot lid and remove any carpet trim from area.
2. Inside boot lid, twist to release bulb holder from behind light assembly.
3. To remove stop/tail light, push in and turn.
4. Insert new bulb and reinstall bulb holder.
5. Replace any carpet trim.
6. Check light operation.

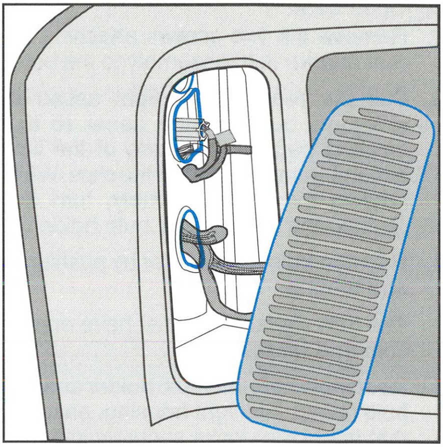
BULB REPLACEMENT cont.

Wagon: rear turn signal (21w), stop/tail (21/5w), reverse (21w)

1. Open the tailgate.
2. Remove the rear light trim cover.
3. Rotate the required bulb holder and pull outwards.

   Bulb holder sequence from top downwards is:

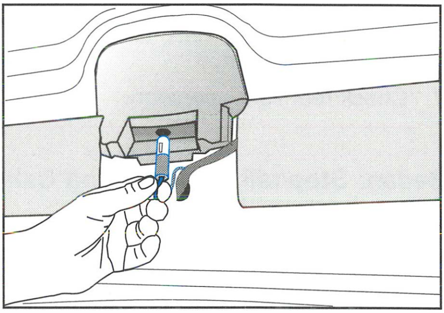
   - Turn signal
   - Reverse
   - Stop/Tail
4. Slightly depress the bulb and rotate to remove from holder.
5. Install the new bulb in the holder.
6. Install bulb holder into car.
7. Refit cover.
8. Check light operation.



Wagon rear high stop light (18 watts)

Open tailgate and remove cover at rear of high level stop light (2 scrivets). From inside cavity of the stop light, twist bulb holder anti-clockwise. Pull bulb holder out of the cavity. Bulb pulls straight out of bulb holder. Install new bulb in bulb holder, refit holder in stop light cavity. Replace cover.

Check light operation.

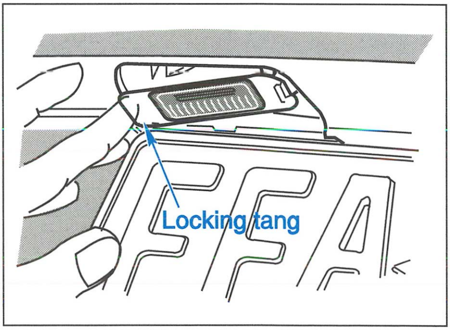


Number plate - wagons and Executive sedans (5 watts)

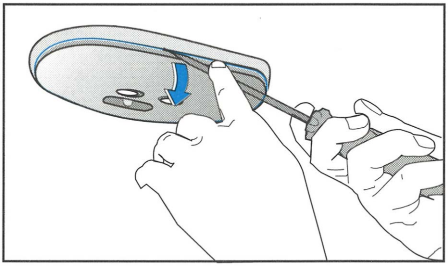
Push the tab on the left side of the lens to the right and pull the lens assembly downwards. Turn the bulb holder anti-clockwise and remove from the lens assembly. Pull the bulb straight out of the bulb holder.

Push new bulb into bulb holder. Install bulb holder into lens. Feed the wiring back into the cavity, fit lens into body, right side first. Push lens housing into place.

Check light operation.



BULB REPLACEMENT cont.



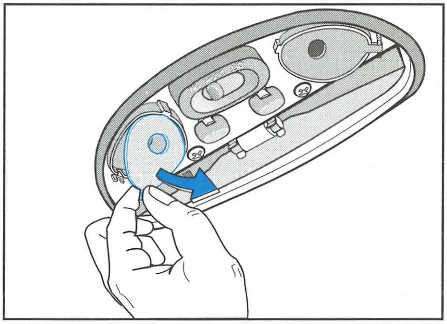
Interior dome (10 watts)

Insert a fine bladed screwdriver in the slot in the centre of the lens and gently lever out.

Remove the bulb by bending the contacts out from the bulb while pulling the bulb down.

Install the new bulb and ensure that both ends of the bulb are firmly in place.

Reinstall the dome lens and push back into place with your hand.



Front reading, if fitted (8 watts)

The front reading lights, if fitted, are part of the dome light assembly. To replace a reading light bulb, first remove the lens of the dome light, as shown above.

Then, remove reading light cover plates by gently pulling the thin tab down.

Pull out the bulb by hand.

Install the new bulb and ensure that both ends of the bulb are firmly in place.

Reinstall the cover plates (large end in first) and click firmly into place.

Reinstall the dome lens and push back into place with your hand.

Footwell lights, if fitted (2.7 watts)

Front footwell light bulbs are located in holders which are a "twist" fit into the right and left hand side trim of the instrument panel.

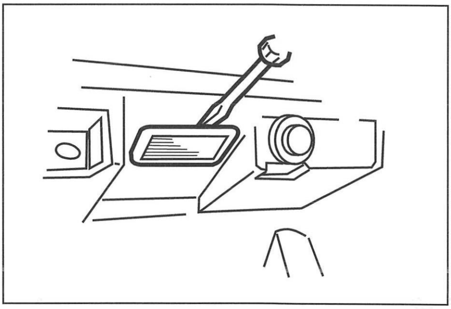
Bulbs are a "push" fit into the holder and are fitted with a green cover. When replacing a bulb ensure that the green cover is installed onto the bulb.

BULB REPLACEMENT cont.

Glovebox - Executive and Berlina (5 watts)
Glovebox - Calais (5 watts)
Console bin, if fitted (5 watts)
Boot (10 watts)
Wagon load area (10 watts)
Door, if fitted (5 watts)
Rear reading, if fitted (5 watts)

Gently prise away the lens housing with a fine bladed screwdriver.

Pull tab holding bulb (opposite end to wiring) backwards and pull bulb out. To install new bulb, first pull tab backwards. When new bulb is in place feed wiring back into cavity and push lens housing back into place.



Fog lights (if fitted), instrument panel lights, vanity mirror lights (if fitted), high mounted stop lights mounted in the rear spoiler (if fitted)

The work of these bulb replacements should be carried out by a Holden Dealer.

NOTES

CHAPTER 7

Weekly checks

Page

7-2 Miscellaneous checks
7-3 Check locations
7-4 Engine oil level check
7-6 Engine coolant level check
7-8 Auto trans. fluid level check
7-9 Washer fluid level check
7-10 Brake fluid level check
7-11 Clutch fluid level check
7-12 Power steering fluid level check
7-13 Tyre air pressure
7-14 Tyres (general)
7-15 Battery
7-16 Trolley jack locations

MISCELLANEOUS CHECKS

As well as taking your car to be serviced (refer Chapter 12) there are a few simple, weekly checks that the owner/operator is required to make. These are shown on the following pages.

CAUTION: The engine cooling fan can start working unexpectedly, even when the engine is not running. To avoid injury from the fan, make sure the ignition key is switched OFF, so that the fan cannot start operating.

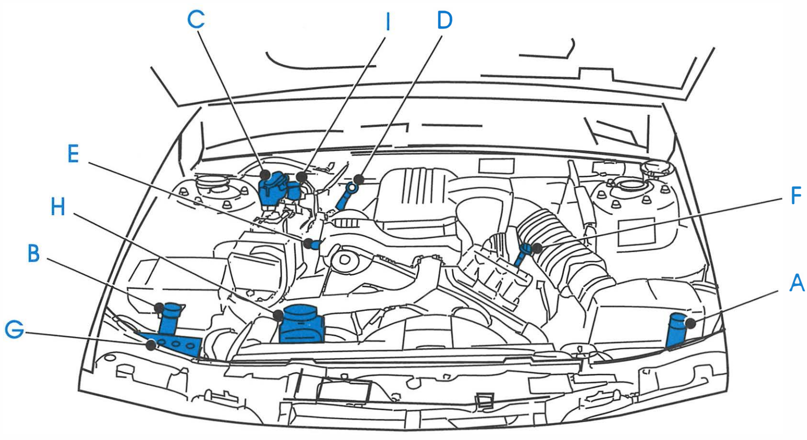
CAUTION: Electronic ignition systems have a high ignition power. Do not touch the ignition system; this could be highly dangerous.

The following checks should also be regularly done to ensure safety of your car.

Check:

- that all exterior lights are working and that their appropriate interior indicators light up,
- mirrors and glass are clean and not scratched,
- automatic transmission T-bar indicator correctly lines up next to the gear selected,
- demister operates,
- horn works,
- condition and operation of all seat belts and check that buckles are clean and operating correctly. Remember that seat belts must never be worn twisted.

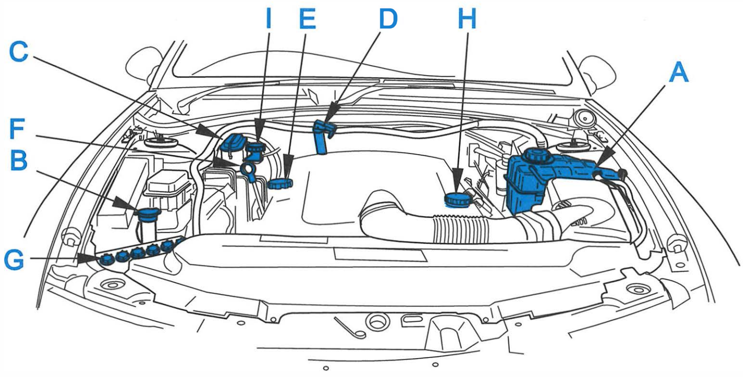
CHECK LOCATIONS



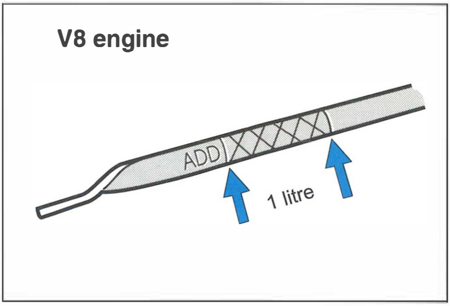
V6 engine

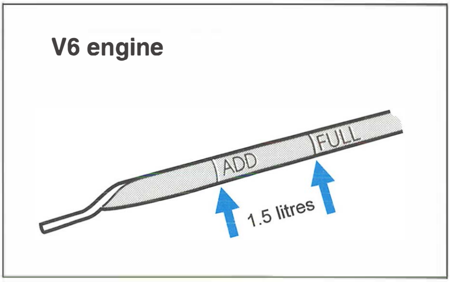
A	Engine coolant	page 7-6
B	Windscreen washer fluid	page 7-8
C	Brake fluid	page 7-9
D	Dipstick for automatic transmission	page 7-7
E	Engine oil cap	page 7-4
F	Dipstick for engine oil	page 7-4
G	Battery	page 7-14
H	Power steering fluid	page 7-11
I	Clutch fluid	page 7-10

V8 engine



ENGINE OIL LEVEL





To check the level

- The oil level should be checked weekly.
- Check the level when the oil is warm, such as when stopping for fuel.
- The car must be on level ground.
- After switching off the ignition wait a few minutes for the oil to settle.

The level is checked from the dipstick. Refer to the diagram on page 7-3 for location.

Remove the dipstick and wipe it clean with a clean cloth or paper. Insert the dipstick firmly all the way down, pause for a second then withdraw the dipstick and look at the oil level on it.

If the level is lower than the ADD mark, top up with enough oil to reach the FULL mark. Be careful not to add too much, as the reading should never be over the FULL mark.

To add oil

Refer to page 8-2 for engine oil specification.

To add oil, turn the oil cap (refer page 7-3 for location) anti-clockwise and remove. Pour the required oil into the opening (clean up any spilled oil). Wait a few minutes for the oil to settle. Then check the oil level with the dipstick again. If still too low, add more oil.

When correct, screw the cap back on tightly and replace the dipstick. If you check the oil level when the oil is cold do not run the engine first, as the cold oil does not drain back into the oil pan fast enough to give an accurate reading.

NOTE: Non-detergent and other low quality oils are specifically not recommended. The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended. Their use increases costs, may be detrimental to the operation of your car and may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended fluid to have affected the specifications or quality of your Holden vehicle.

Oil change intervals

The oil must be changed every 10,000 km. This is the *maximum* service interval for changing the oil and is based on the average car use of driving 10,000 km in 6 months.

If you have not travelled 10,000 km when 6 months comes up you should have the oil changed anyway, as oil deteriorates over time, not just when driving. Refer Chapter 12 for servicing requirements, particularly *abnormal* driving conditions.

ENGINE OIL CONSUMPTION

Every internal combustion engine uses a certain amount of oil, especially when running-in. The engine is dependent on oil for lubricating critical areas, such as the cylinder walls, pistons, rings and valve stems. These parts are all subjected to high friction loads, and will prematurely wear out without a constant supply of engine oil. A thin film of oil is left on the cylinder walls, some of which is carried into the combustion chamber and burnt during the combustion process. This also applies to the film of oil on the valve stems which is drawn into the combustion chamber and burnt.
There are several other factors that contribute to the rate of oil consumption in your engine: the way in which the car is operated; the quality and grade of oil; the oil level and dilution of the oil; worn pistons, rings, valve stems and guides.

Operation of the car: High speed driving and heavy towing increases engine temperature, which lowers oil viscosity, causing more oil to reach the combustion chamber and get burnt away. The oil level should always be checked prior to towing or a long trip.

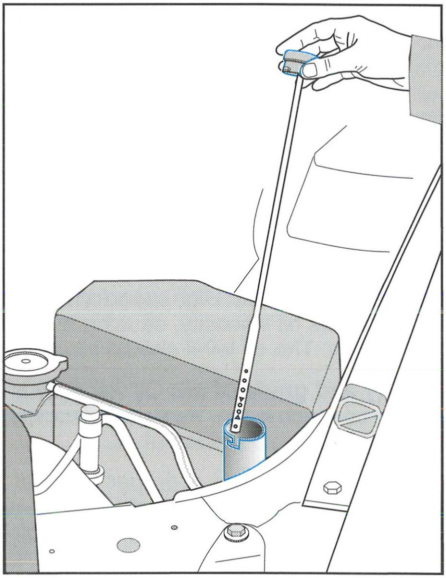
Quality and grade of oil: Oil viscosity is a significant factor in oil consumption. If you use an oil which is too “thin” (low viscosity) your oil consumption will increase. Use only the recommended grades of oil.

Oil level: Maintaining a proper oil level is also an important factor in controlling oil consumption. An over-full engine will splash oil onto the cylinder walls in quantities greater than the piston rings can control. This excess oil is drawn into the combustion chamber and burnt, or may result in aeration of oil in the sump causing damage to the engine.

Dilution: Probably the most prevalent complaint of oil consumption comes from the driver whose car is frequently driven on short trips where the engine often fails to reach normal operating temperatures. The oil becomes diluted by fuel and moisture that settles in the oil pan. This may raise the oil level creating a false reading on the oil level dipstick. For example, in a car that has accumulated 1,500 km of short distance or intermittent city operation and has consumed a normal amount of oil, the level may not have dropped from the FULL mark, due to dilution. If this car is driven for some distance at highway speeds on a warm day, the dilution elements evaporate lowering the oil level. This sudden change in oil level can give the driver the impression that an excessive amount of oil has been "lost" in the highway operation.

Measuring oil consumption: A simple economy test can be performed if the driver is concerned by an apparent drop in the oil level.
Add sufficient oil to bring the level up to the "FULL" mark on the dipstick (avoid overfilling). Take note of the odometer reading and check the oil periodically. When the level reaches the "ADD" mark, carefully measure the amount of oil required to return the level back to "FULL" and note the odometer reading. The amount of oil added for the kilometres travelled over the duration of the test indicates the oil economy of the engine. Remember to check the oil level at the start and finish of the test on level ground and allow time for oil to drain down. Avoid minor top-ups (0.25 to 0.5 litres) when measuring oil economy, as inaccuracies of oil quantity added, may cloud the result.
If, after taking into account the above factors, you are still concerned that your engine has excessive oil consumption then you should discuss the situation with a Holden Dealer. Remember that an engine’s oil consumption should not be judged until it has run at least 10,000 km.

ENGINE COOLANT LEVEL - V6 ENGINE



The coolant level should be checked at least weekly. The cap for the coolant reservoir is yellow and has the word "COOLANT" marked on the top. It is located in the engine compartment, behind the passenger's side headlight.

Ensure the ignition is switched off.

Turn the coolant dipstick cap one eighth of a turn anti-clockwise and slowly pull out the dipstick.

There are two triangles on the dipstick, representing MAXIMUM and MINIMUM fluid levels.

When the engine is cold, the coolant level should be at or above the MINIMUM triangle mark on the dipstick. After the car has been driven and the engine is at normal operating temperature, the level should be somewhere between half full and the MAXIMUM triangle mark.

If the coolant level is correct, replace the dipstick and turn the cap one eighth of a turn clockwise to secure.

The coolant in your car conforms to Holden specification number HN 2043. This can be purchased from a Holden Dealer as: 92140054 (1 litre); 92140057 (5 litres); 92140055 (20 litres). Failure to use the coolant meeting Holden's specification or maintaining the specified concentration may result in voiding your warranty.

If the coolant requires topping up, mix a solution of 50% Holden's coolant and 50% water in a container. Pour the fluid into the dipstick tube (the same opening as the dipstick is stored in). Again check the level with the dipstick and add further fluid if necessary. When the level is correct, replace the dipstick and turn the cap one eighth of a turn clockwise to secure. Note that the dipstick should only be replaced one way. The word "COOLANT" on the cap should be able to be read from the front of the car. If the wording is facing the rear of the car the dipstick should be turned 180 degrees and then secured.

In emergency situations, plain water may be used temporarily until the correct Holden coolant is obtained (as soon as possible) from the nearest Holden Dealer.

The specified coolant works in three ways: it contains special corrosion inhibitors, it helps the cooling system in hot weather by increasing the boiling point and it protects against freezing down to -37°C, provided the 50% concentration is maintained.

If you regularly have to top up the cooling system you should see your Holden Dealer.

CAUTION:
Corrosion inhibitors and anti-freeze fluids are poisonous. Use extreme care when handling. If swallowed, seek medical attention. Do not remove the radiator cap or plastic coolant tank cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

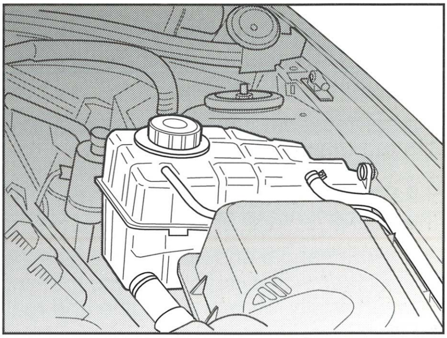
Refer to Chapter 6 if engine overheats or loses a lot of coolant.

COOLANT LEVEL- V8 ENGINE

Cars with a V8 engine have a low coolant warning light in the instruments. To check that the bulb is working the light is shown for a few seconds when the ignition is first turned ON.

If the light is shown when driving it indicates that the engine coolant level is very low. You should check the level as soon as possible. As this may involve checking the level when the coolant is hot, refer to the instructions in "Overheating" in Chapter 6 and the relevant cautions in that chapter.

Regardless of the low coolant light, the coolant level should be checked at least weekly, by looking at the level in the plastic tank when the engine is **cold**. For ease of location, the coolant cap is coloured yellow.



The coolant level should be at or slightly above the "COLD FILL" mark at the centre weld joint when the engine is cold. The level rises when the engine is running and drops again when the engine cools down. If the level falls below the weld joint, coolant should be topped up to a little over the mark. Do not overfill, as coolant requires space to expand when warmed up.

The coolant in the V8 engine conforms to GM 6277M specification, and is otherwise known as Dex-Cool, and can be bought from your Holden Dealer. The concentration used is 50% water and 50% Dex-Cool.

If the coolant requires topping up, pre-mix a solution of 50% Dex-Cool and 50% water in a container, then (when the engine is cold) undo the cap and pour the fluid into the plastic tank. When the level is correct, replace the cap and turn clockwise until secure.

Failure to use Dex-Cool at 50% concentration may result in voiding your warranty.

In emergency situations, plain water may be used temporarily until Dex-Cool is obtained (as soon as possible) from the nearest Holden Dealer.

Dex-Cool works in three ways: it contains special corrosion inhibitors, it helps the cooling system in hot weather by increasing the boiling point and it protects against freezing down to -37°C, provided the 50% concentration is maintained.

If you regularly have to top up the cooling system you should see your Holden Dealer.

CAUTION:
Corrosion inhibitors and anti-freeze fluids are poisonous. Use extreme care when handling. If swallowed, seek medical attention. Do not remove the coolant cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

Refer to Chapter 6 if the low coolant light shows or if the engine overheats or loses a lot of coolant.

AUTOMATIC TRANSMISSION LEVEL

The fluid level should be checked monthly, by looking at the fluid level on the dipstick.

The dipstick is located at the rear of the engine compartment, on the driver's side (refer to diagram on page 7-3).

Dirt in the transmission can cause breakdowns, so be careful when checking or adding fluid.

The fluid should be checked after the car has been driven for at least 20 kilometres - so that the fluid is warm.

The car must be standing on level ground with the engine running.

The gear shift selector should be in PARK and the park brake applied.

Unclip the handle and remove the dipstick; wipe it clean with a clean cloth or paper and re-insert it fully. Remove it again and read the fluid level.

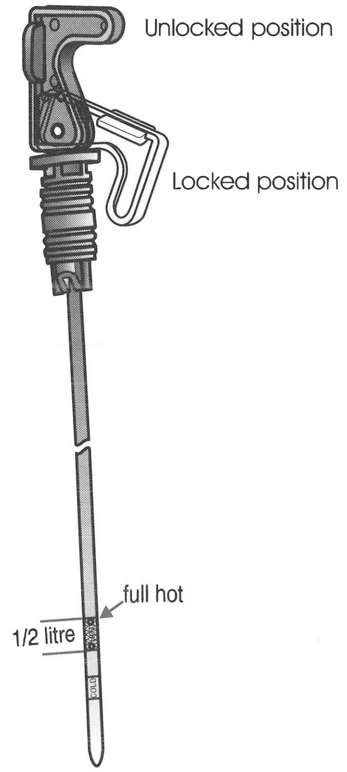
The fluid level should be showing on the cross hatched HOT area.

The level should NEVER read over the FULL HOT mark, so be careful not to add too much.

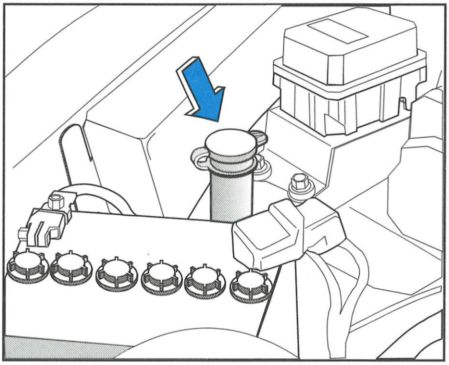
If adding fluid, use only DEXRON®III AUTOMATIC TRANSMISSION FLUID. Add the fluid in the dipstick tube (the same opening as the dipstick is stored in) and wait one minute for the oil to settle (clean up any spilled fluid). Again check the level on the dipstick with the engine running and add further fluid if necessary. Remember to always replace the dipstick and lock the handle down.

If fluid has to be added often, there may be a problem or leak and you should see your Holden Dealer.

NOTE: The cold markings on the dipstick should only be used as an indication when initially filling the transmission after the fluid has been completely drained. It should be rechecked when hot.



WASHER FLUID LEVEL



The washer container is marked yellow and is located in the engine compartment, near the battery. It has a flip top cap.

The container shown supplies water to both the front windscreen washer and rear wagon washer.

As washer fluid is constantly used the level should be topped up weekly.

For a crystal clear windscreen, the correct amount of Optikleen (part number 92140005) can be added. Do not use ordinary soap or detergent as these not only froth up but will also damage the wiper rubbers.

Make sure the cap is secured.

Note that washer jets are not adjustable, and can be damaged if tampered with.

BRAKE FLUID LEVELS

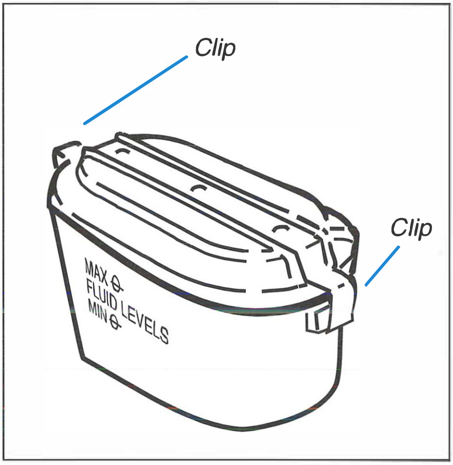
CAUTION: Brake fluid is poisonous and corrosive and will damage the paint finish of your car if spilt.

The brake fluid level in the master cylinder should be checked weekly. The fluid level, is visible through the master cylinder (see page 7-3 for location) and should be maintained between the MIN and MAX level markings. If the fluid is between these levels do not remove the master cylinder cap, as brake fluid exposed to the atmosphere will quickly absorb moisture.

If fluid does need to be added, first ensure that the ignition is switched to OFF. Wipe clean the sides of the top cover. Then, unclip and lift off the top cover. Top up with heavy duty brake fluid which meets Holden specification number HN 1796. Remember to secure the cap at each end and clean up any spilled fluid.

Use only new brake fluid. Use of old, used or inferior brake fluid may endanger the functioning of the brake system.

If the master cylinder requires constant topping up it could indicate that a fault exists and you should immediately see your Holden Dealer.



CLUTCH FLUID LEVEL

CAUTION: Clutch fluid is poisonous and corrosive and will damage the paint finish of your car if spilt.

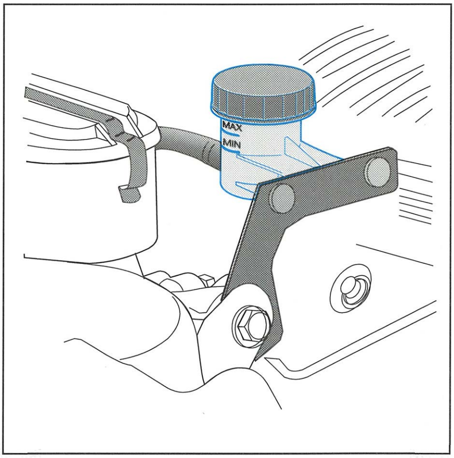
The clutch fluid level should be checked weekly. The fluid level, is visible through the container and should be maintained between the MIN and MAX level marks. If the fluid is between these levels do not remove the cap, as the fluid will quickly absorb moisture if exposed to the atmosphere.

If fluid does need to be added, first ensure that the ignition is switched OFF.

Wipe clean the sides of the cap and remove the cap. Top up with heavy duty brake fluid (both the clutch system and the brake system use **brake** fluid) which meets Holden specification number HN 1796. Remember to replace the cap and clean up any spilled fluid.

Use only new fluid. Use of old, used or inferior fluid may endanger the functioning of the clutch system.

If the clutch fluid requires constant topping up it could indicate that a fault exists and you should immediately see your Holden Dealer.



POWER STEERING FLUID LEVEL

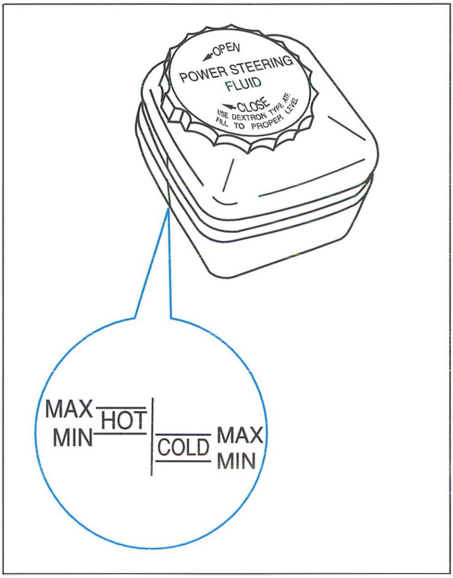
The level should be checked after the car has been driven for a while (at least 20 minutes) so that the fluid is warm. A convenient time is when stopping for petrol. The cold level check should only be used after the engine has not been running for at least 5 hours. The hot level check, however, is always recommended.

Refer page 7-3 for location of the reservoir.

V6 engines

The fluid level can be viewed through the transparent reservoir. The level markings are on the rear of the reservoir.

When the fluid is cold the level should be between the COLD MIN and MAX marks; when the car has been driven for a while and the fluid is hot the level should be between the HOT MIN and MAX marks.

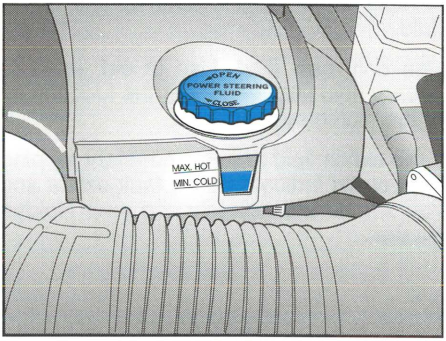


V8 engines

The fluid level can be viewed through the transparent reservoir. The level markings are next to the fluid window.

When the engine is hot the level should be between the MAX HOT and half way to the MIN COLD mark.

If the level is getting close to the MIN COLD mark when the engine is cold, add enough fluid to bring the level to half way between the two marks.



All engines

If fluid must be added, undo the cap anti-clockwise and lift off.

Use DEXRON® III.

Do not over fill and remember to replace the cap tightly. If you often need to add fluid, you should see your Holden Dealer.

Remember to secure cap when level is correct and clean up any spill.

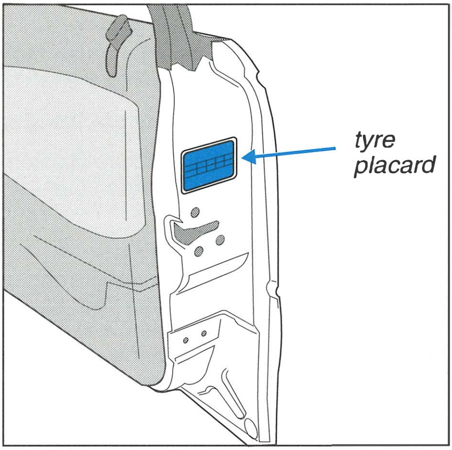
TYRES

Air pressure

Weekly checking of the air pressure of your tyres (including the spare) ensures your safety, as well as reducing fuel consumption and increasing the life of your tyres.

For constant long distance or rough road driving, daily checking is recommended.

The correct pressure for your tyres is shown on the tyre placard, as shown.



Tyre inflation pressure increases when the tyres have been driven more than 2 km. Therefore, the pressure should be checked when the tyres have been stationary for over 3 hours. If they must be checked immediately after driving, increase the pressure shown on the placard by 10%.

Always use a tyre pressure gauge to check the tyres - simply looking at the tyres is not sufficient.

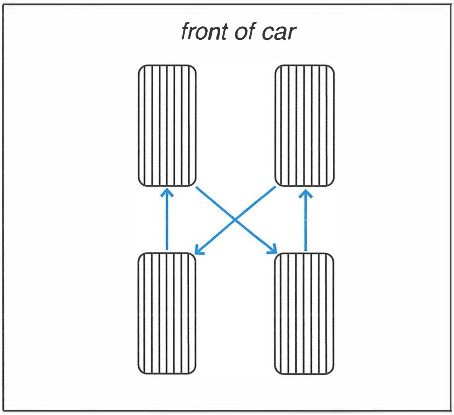
Remember to replace any valve dust caps or extensions, as this stops dirt and moisture from fouling the valves.

When checking the tyre air pressure, take a look at the condition of the tyre tread and inspect for stones or abnormal wear.

Cars driven for prolonged periods over rough roads, particularly in outback conditions, should use the cold tyre inflation pressure on the tyre placard for maximum load condition.

Tyre rotation

Front and rear tyres perform different jobs and can wear differently depending on the types of roads driven, your driving habits, wheel alignment, balance, tyre pressures etc.



Tyre condition is checked for you when you take your car to be serviced by your Holden Dealer, who is able to diagnose any unusual signs of wear. If the tyres are rotated it is recommended that the balance be checked at the same time.

TYRES cont.

Alignment and balance

Improper wheel alignment can cause the tyres to wear faster and to wear unevenly. It can also cause the car to pull to the left or right.

Out-of-balance wheels and tyres can cause annoying vibration and uneven tyre wear.

If you suspect either of the above problems exist have a wheel alignment and balance check carried out by your Holden Dealer.

Replacement and repair

Replacing your factory fitted wheels and tyres with non-specified wheels and tyres may affect your warranty as well as your insurance policy. Refer to the tyre placard on your car for tyre size and load rating, see previous page. Using a different size or type of tyre may affect such things as ride, handling, speedometer, car ground clearance, tyre clearance or snow chain clearance.

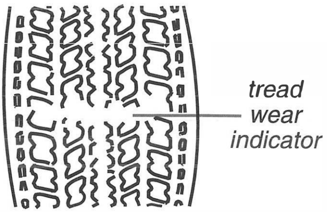
Take care when using tyres with heavy treads, including tyres made for better grip in the wet. At sustained high speeds, this type of tyre runs at higher temperatures than standard tyres and consequently should only be operated within the limits recommended by the manufacturer. Any doubts about the tyres on your car should be referred to your Holden Dealer.

Tyres with a *higher* speed or load rating are acceptable, provided they are fitted to a suitable rim size.

New tyres should be fitted in pairs to the front. If replacing only one tyre, it should be paired on the same axle with the least worn of the other three.

You should replace your tyres when:

- The tyres are worn to the point where the tread indicators appear, or the cord or fabric is showing. The tyres originally fitted to your car have built-in tread indicators. When only 1.5 mm of tread remains, these indicators show as plain bars across the tread pattern at regular intervals around the tyre.
- The tread or sidewall is cut, split, or cracked deep enough to expose the cord or fabric.
- The tyre has a bump or bulge in it, indicating some kind of internal damage.
- The tyre has a puncture, cut or other damage which can't be repaired because of the size or location of the damage.



Do not attempt to drive on the flat tyre more than is necessary to stop safely. Driving even a short distance can damage the tyre and wheel beyond repair. Tyres which have been repaired or retreaded are not capable of being driven safely at high speeds. Therefore, their use is not recommended.

BATTERY

CAUTION:

- Batteries emit an explosive gas mixture which may be ignited. You should, therefore, keep sparks and flames away from the battery at all times. Never smoke near a battery.
- Batteries contain sulphuric acid. If acid contacts skin or clothing, flush immediately with a lot of water. In case of eye contact, flush with a lot of water and contact a doctor immediately. Battery acid also damages paint and fabrics. To minimise damage, wash off immediately.
- Take care with all metal objects and tools including items you may wear (e.g., jewellery, rings and metal watch bands) near battery terminals.

Fluid check

The fluid level of the battery will be checked for you when you take your car to be serviced by your Holden Dealer. If your car is operated in hot temperatures or at constant high speed the battery fluid level should be checked each month.

When checking the battery level, make sure the engine is not running. Each of the six cells must be individually checked. Use distilled water, as required, to keep the level just below the bottom of each split tube. DO NOT OVER FILL.

Cars with V8 engines have a battery cover to keep the battery cool. The cover should always be securely in place when driving.

Refer Chapter 6 for emergency starting when the battery is flat.

Replacement batteries should be: Low Maintenance, 12 volt 85 mins reserve capacity/ 430 cold cranking amps.

Battery disconnection

The battery is recharged by the generator when the engine is running. If the engine is not run for approximately 6 weeks the battery will discharge, due to the power required by the security system etc. If the battery is disconnected it will discharge anyway after approximately 12 weeks.

If you disconnect the battery when leaving the car for a long period of time, it is recommended that the battery be "trickle fed" on a battery charger over-night, before replacing it in the car.

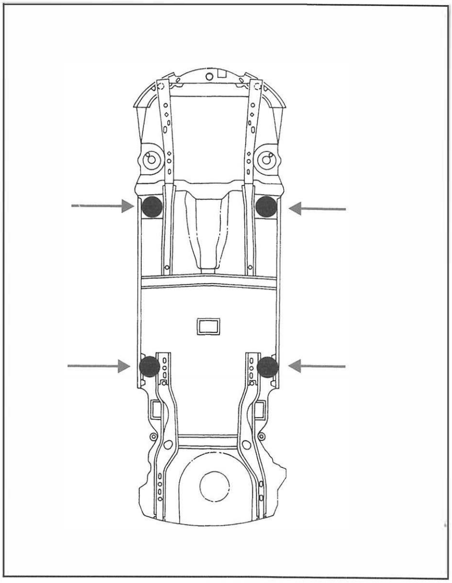
If the battery is disconnected for a short time the radio security number, the PIN, has to be entered, refer Chapter 2. After entering the PIN the radio resumes playing and the settings and station numbers are remembered. After approx. 8 hours of battery disconnection all preset radio settings are forgotten.

Higher luxury cars are fitted with the personal identity key system (refer Chapter 2). If the car's battery has been disconnected the key may "forget" some settings. Your adjustments will be remembered by the key the next time you adjust the feature.

TROLLEY JACK LOCATIONS

You should always use the jack locations shown on page 6-8 when using the original jack supplied with your car. This jack has been designed to correctly and safely lift your car, provided the cautions in Chapter 6 are observed.

However, if using a trolley jack to raise the car, it is important that the jack be positioned under the suspension cross member or hoist pad locations. DO NOT JACK UNDER THE SUSPENSION CONTROL ARMS. The car should always be supported by jack stands when raised.



NOTES

CHAPTER 8

Specifications

Page

8-2 Lubricants and fluids
8-2 Power and torque
8-2 Capacities
8-3 Body dimensions
8-4 Identification plates

GENERAL SPECIFICATIONS

Engine type	3800 (V6) 6 cylinder, direct fire ignition, port fuel injection	3800 (V6) 6 cylinder, supercharged	Gen III (V8) 8 cylinder
Engine oil spec.	For optimum fuel economy, use 10W/30 ILSAC GF2 engine oil. If this oil is unavailable, use SG, SH or SJ engine oil, with viscosity of 20W/50 or 15W/40. **		
Refill engine oil capacity	4.8 litres approx (incl. filter)		5.0 litres approx. (incl. filter)
Engine Power	152 kW @ 5200 rpm	*171 kW @ 5200 rpm	225 kW @ 5200 rpm
Engine Torque	305 Nm @ 3600 rpm	*375 Nm @ 3200 rpm	460 Nm @ 4400 rpm
Coolant spec.	50% water and 50% coolant, conforming to Holden spec. no. HN 2043, part no. 92140054 (1 litre) or 92140057 (5 litres). In addition, 3 pellets, part no. 92140053 must be added when the coolant is replaced.		50% water and 50% Dex-Cool conforming to GM 6277M specification.
Coolant capacity	12 litres approx		
Auto trans fluid	Dexron® III		
Refill auto trans capacity	4.8 litres, approx.		5 litres, approx.
Manual trans fluid	Refer to your Holden Dealer		
Brake & clutch fluid	Heavy duty brake fluid, conforming to Holden Spec. Number HN1796		
Power steer fluid	Dexron® iii		
Fuel tank capacity	75 litres, also refer Chapter 5		

* Power and Torque figures based on premium unleaded petrol

** Cars on LPG: refer to separate LPG supplement for engine oil specification

GENERAL SPECIFICATIONS cont.

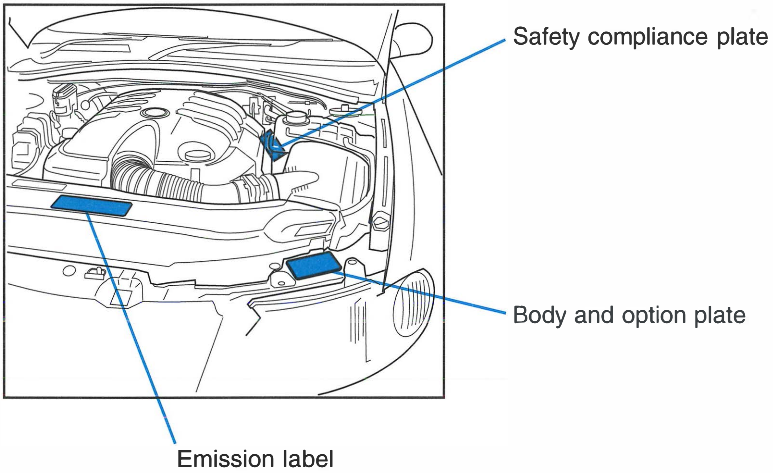
Dimensions (mm)

	SEDAN			WAGON	
	EXEC.	BERLINA	CALAIS	EXEC.	BERLINA
Length	4891	4964	4964	5046	5084
Width, excluding mirrors	1842	1842	1842	1847	1847
Height	1455	1455	1455	1521	1521
Wheel base	2789	2789	2789	2939	2939
Overhang - front	933	972	972	933	972
Overhang - rear	1169	1203	1203	1174	1174
Front track	1569	1569	1569	1569	1569
Rear track	1587	1587	1587	1587	1587

Body lubricants

Bonnet catch	NLGI No. 1 Lithium Grease (with Zinc Oxide) meeting Holden Specification HN 1225.
Door hinge grease	NLGI No. 1 Lithium Grease (with Zinc Oxide) meeting Holden Specification HN 1225.
Check link housing	NLG1 No. 2 Polyurea Grease (mineral oil base) 1.2 g applied to arm
Check link arm	NLGI No. 2 Lithium Complex Grease 1.2 g applied to housing
Front door lock cylinder	Powered Graphite applied through key aperture DO NOT OIL

IDENTIFICATION LABELS



Body and Option Plate

This plate shows model identification, body serial number, paint and trim colour combination, paint number, engine, transmission, axle ratio options, suspension options (where applicable) and built date. The built date is defined as “the date of manufacture” by calendar month and year in which the body shell and power train sub-assemblies are co-joined and the car is driven or moved from the production line.

Safety Compliance Plate (Australian cars)

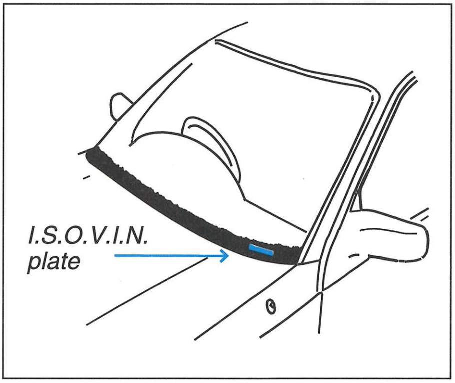
Shown on the plate are the vehicle Make, Model Series, Date of Manufacture, Vehicle Identification Number, approved seating capacity, Gross Vehicle Mass (GVM) on utility and Approval Number.

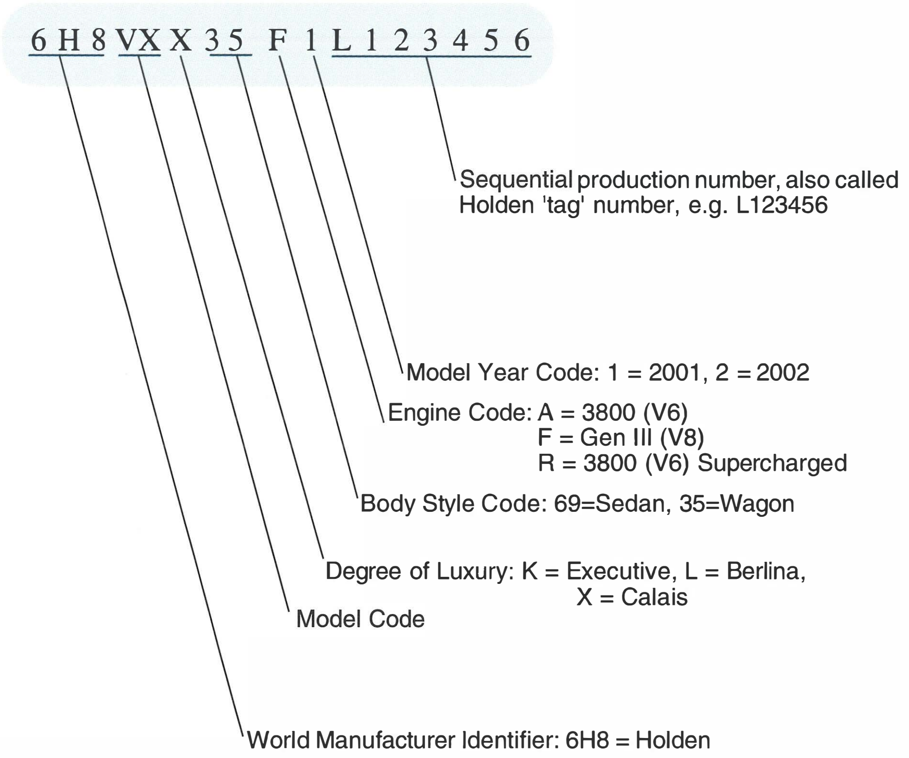
Emission label

This label shows the relevant tune-up information required to maintain minimum exhaust emissions.

I.S.O.V.I.N.

Each vehicle has its own, individual I.S.O.V.I.N., which is shown on the windscreen of your car.





Sequential production number, also called Holden 'tag' number, e.g. L123456

Model Year Code: 1 = 2001, 2 = 2002

Engine Code: A = 3800 (V6)
F = Gen III (V8)
R = 3800 (V6) Supercharged

Body Style Code: 69=Sedan, 35=Wagon

Degree of Luxury: K = Executive, L = Berlina,
X = Calais

Model Code

World Manufacturer Identifier: 6H8 = Holden

CHAPTER 9

After Sales

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9-4 Parts and Accessories Warranty
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Note: Dealership names and details may change after the printing of this Handbook. The list contains both Authorised Holden Dealers and Authorised Holden Service Operations.

NEW VEHICLE WARRANTY CERTIFICATE

New Vehicle Warranty application

This Warranty is given by Holden Ltd. ABN 84 006 893 232, ("Holden"). The Warranty applies to the vehicle identified on the inside front cover of this Owner's Handbook. It is provided to the original and subsequent owners/operators driving the vehicle within Australia during the Warranty Period.
This Warranty is given in addition to all rights conferred by law on that person.

Australian vehicles

This Warranty is only applicable to vehicles purchased and operated in Australia.

Owners of vehicles purchased in Australia but operated overseas should consult the local dealer in the country of operation about any Warranty applicable to their vehicle. This Warranty does not apply for Holden vehicles exported overseas. Similarly, this Warranty is not provided for vehicles purchased overseas and imported into Australia.

Repairs covered

Subject to the exclusions shown on the following page, this Warranty covers the correction, during the Warranty Period, of any vehicle defect related to materials or workmanship and advised to a Holden Dealer or Authorised Service Outlet, by repair or at Holden's option by replacement.

100,000kms
3
years

Warranty Period

The coverage commences from the date of delivery (or in the case of a demonstrator vehicle the date when the vehicle was first placed into service by the Dealer). The coverage expires at the end of the period of 3 years after the commencement date or after the vehicle has travelled 100,000 kilometres, whichever occurs first.

No charge

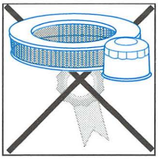
Warranty work undertaken (including parts and labour) will be carried out at no cost to the vehicle owner. However, this work should not be confused with servicing specified in the Maintenance schedule in Chapter 12 of this Owner's Handbook for which a charge is payable.

NEW VEHICLE WARRANTY CERTIFICATE cont.

Warranty exclusions

- **Damage**

  Your Warranty does not extend to the following damage:
  Damage caused by an accident, fire, theft or moving objects striking the vehicle.
  Damage caused by industrial fallout, chemicals or sealants.
  Damage caused by atmospheric fallout or flood, hail, salt, etc.



- **Maintenance items**

  Services such as brake adjustment, replacement of filters, wiper rubbers etc., which are required as part of normal vehicle maintenance (refer Chapter 12).

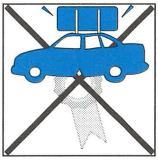
Manufacturer

- **Tyres**

  The tyres (and tubes where applicable) fitted to your vehicle are not covered by this Warranty. However, they may be covered by the tyre manufacturer.

- **Batteries**

  Batteries are warranted for 12 months.



- **Misuse**

  This Warranty does not cover damage caused by:

  (a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc., or neglect
  (b) operation of the vehicle after the defect is known
  (c) failure to carry out proper maintenance services (refer Chapter 12)
  (d) use of incorrect types and grades of fuel, oil or lubricants
  (e) alteration of the vehicle by anyone not authorised by Holden
  (f) fitting of parts or accessories not marketed by Holden
  (g) any work carried out on the vehicle by anyone except an authorised Holden Dealer or authorised Service Outlet.

PARTS AND ACCESSORIES WARRANTY

Holden warrants Holden approved Parts and Accessories ("Parts" and "Accessories") for the periods and on the conditions set out below. The Warranty covers the correction, during the relevant Warranty Period, of defects in any such Parts and Accessories, by repair or at Holden's option by replacement.

- **Accessories installed to the new vehicle**

  Holden approved Accessories installed by a Holden Dealer or authorised Service Outlet to the new vehicle at the time of purchase are covered together with the New Vehicle warranty for the period of 3 years or 100,000 km, whichever occurs first.

- **Parts and Accessories installed after new vehicle delivery by a Holden Dealer or authorised Service Outlet**

  Parts and Accessories installed after new vehicle delivery by a Holden Dealer or authorised Service Outlet are covered for 2 years or 50,000 km (whichever occurs first). If the vehicle is still within the New Vehicle Warranty the Parts and Accessories are covered by the longer of:

  2 years/50,000 km (whichever occurs first)

  or

  the end of the New Vehicle Warranty.

  As an example, an Accessory installed in a 7 month old car would be covered until the end of the New Vehicle Warranty; an Accessory installed in a 2½ year old car would be covered until the end of 4½ years or a further 50,000 km from when the Accessory was installed.

- **Purchased at retail or trade**

  Parts and Accessories purchased at trade or retail and installed by other than a Holden Dealer or authorised Service Outlet are warranted for 1 year from the date of purchase. Please keep a receipt to support warranty claims.

  The Warranty does not cover the labour costs of removal / reinstallation of Parts and Accessories when installed or rectified by other than a Holden Dealer or authorised Service Outlet.

- **Parts and accessories warranty exclusions**

  The tyres (and tubes where applicable) are not covered by this warranty. However, they may be covered by the tyre manufacturer.

  Batteries are warranted for 12 months from date of purchase.

  Parts which are required as part of normal vehicle maintenance are warranted against manufacturing defect at the time of installation.

WARRANTY QUESTIONS

This section is designed to assist you in understanding the Holden Warranty provided with your new vehicle.

The following are some of the most frequently asked questions for which detailed answers have been provided.

Q 1. How do I go about obtaining Holden Warranty service?

It is the responsibility of the Selling Dealer to provide Holden Warranty service, therefore, you should take your vehicle to the Selling Dealer whenever Holden Warranty service is needed. However, if this is not possible, you may go to any other Authorised Holden Dealer. The details recorded inside the front cover of this handbook will be required by the Dealer. Retailer

Q 2. What should I do if my vehicle becomes unsafe or inoperative as a result of a defect which is covered by the Holden New Vehicle Warranty?

You should contact the nearest Authorised Holden Dealer or Holden Customer Assistance Service (refer further in this chapter) as soon as possible, and arrange for that Dealer to carry out the required Holden Warranty Service.

Q 3. What should I do if, in an emergency, Holden Warranty service is required and an Authorised Holden Dealer is not available to provide such service at the time?

If, in an emergency, a repair, replacement or adjustment (covered by the Holden New Vehicle Warranty) is required to enable your vehicle to be operated safely and it is not practical for you to go to an Authorised Holden Dealer, the service (to the extent that it is necessary to enable your vehicle to be operated safely) may be performed by any other qualified mechanic or repairer. A claim for the reasonable cost may be made through the authorised Holden Dealer who would normally provide you with Holden Warranty service. You must also take your vehicle to the Authorised Holden Dealer for inspection of the service and/or completion of any required Holden Warranty service, as soon as possible.

Note: During normal business hours you should seek authorisation from your nearest Authorised Holden Dealer or Holden Customer Assistance Service, prior to repairs being commenced.

Q 4. Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the Holden Warranty?

No, these items are not covered. Holden warranty only covers the repair, replacement or adjustment of those parts of your vehicle which are found to be defective in materials or workmanship. No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your vehicle, will be recognised under the Holden New Vehicle Warranty.

You may have rights under the law to claim compensation outside of the Holden New Vehicle Warranty, but any claim based on those rights should be separately pursued.

WARRANTY QUESTIONS cont.

Q 5. Will I have to pay for maintenance costs during the Warranty Period?

Maintenance costs are not covered by the Holden New Vehicle Warranty. The Maintenance Schedules in this handbook (refer Chapter 12) specify the *minimum* maintenance required for your vehicle operating under normal conditions.

The Maintenance items (except where they are required as a result of defects in materials or workmanship) for which you will have to pay include:

- Engine tune-up, including spark plugs replacement.
- Replacement of all filters, engine and other belts, hoses, wiper blades, clutch linings.
- Cleaning or flushing of fuel, coolant, brake, engine, transmission, differential, power steering etc., after 1,500 km.
- Carbon and sludge removal.
- Maintenance servicing of emission control system devices.
- Adding to (or replacing) lubricants.
- Adding to (or replacing) air conditioning refrigerant, after 1,500 km.
- Any necessary adjustments to drive belts, transmissions, clutch, park brake etc.
- Wheel balancing - after 5,000 km.
- Wheel alignment.
- De-dusting or de-glazing of brake linings or pads - after 1,500 km.
- Brake lining wear or damage.
- Brake disc pad or disc wear.
- Battery recharging.
- Paint, bright metal finish and trim, due to normal deterioration.
- Body panel adjustment - after 1,500 km.
- Door, or bonnet lock adjustments.
- Glass or channel adjustments - after 1,500 km.
- Body rattle, squeaks and general tightening of bolts, fasteners and fittings - after 1,500 km.
- Chipped glass or breakage.
- Torn or damaged floor mats or carpets.
- Normal wear and tear to trim components.

Q 6. Are my tyres covered by the Holden New Vehicle Warranty?

No. The tyres fitted to your vehicle are covered by a separate warranty provided by the tyre manufacturer. Any Authorised Holden Dealer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturer's representative.

WARRANTY QUESTIONS cont.

Q 7. Will I have to pay for any costs or expenses in connection with the provision of Holden Warranty service?

All parts and labour used in carrying out Holden Warranty service at the premises of the servicing Holden Dealer are free of charge. Whenever Holden Warranty service is to be carried out by the servicing Holden Dealer it is your responsibility to deliver your vehicle to the servicing Holden Dealer's premises.

If, as a result of a defect which is covered by the Holden New Vehicle Warranty, your vehicle cannot be driven safely and you arrange for the nearest Authorised Holden Dealer to carry out the required Holden Warranty service, Holden will accept reasonable towing costs to move your vehicle to the nearest Holden Dealer's premises. Before employing a towing company, contact the nearest Holden Dealer and/or Holden Customer Assistance Service (refer page 10 of this Chapter) to obtain guidance.

Q 8. Would my vehicle's engine benefit from fuel additives, oil additives or coolant additives not marketed by Holden ?

The use of break-in oil, tune-up compounds, friction-reducing compounds and other supplemental additives is not recommended; their use will not only increase operating costs, but may also be detrimental to the operation of your vehicle.

Only the fluids and lubricants referred to in this handbook should be used.

UNAUTHORISED STATEMENTS IN RELATION TO HOLDEN PRODUCTS

No Holden Dealer or other person is authorised or permitted to give or make any statement, assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any Holden product or in connection with the supply of any Holden product, which is at variance with any written statement, assertion or undertaking on any of these subjects given or made by Holden in its published sales literature, and Holden does not accept any such unauthorised action.

ROADSIDE ASSISTANCE

3 YEAR
24 HOUR ROADSIDE ASSISTANCE

Our commitment to your satisfaction

Holden's Roadside Assistance is part of the unequalled commitment by Holden to provide total motoring satisfaction.

From the moment delivery is made, our aim is to provide the finest possible ownership experience, from design through manufacturing to servicing and now beyond to the open road, Australia wide.

We hope the need never arises, but if it does, we'll be there to help through Holden Roadside Assistance.

How does Holden Roadside Assistance work?

Holden Roadside Assistance is provided by Holden Ltd., and delivered by the collective resources of the Australian Automobile Clubs and Associations (the constituents of Assist Australia) the AA.

Which vehicles are covered by the service?

As of 1st November 1993 all new Holden passenger and light commercial vehicles are covered for 36 months from the date of first registration.

Holden Roadside Assistance is extended to private and business vehicles, taxis, rental companies, all government and fleet operators.

What will Holden Roadside Assistance do for me?

Holden Roadside Assistance is designed to get you mobile on any road that is trafficable to normal two wheel drive vehicles. In the event of the unexpected happening, from your keys being locked in your car to mechanical and accident advice, help is readily available by simply calling the toll free number 1800 817 100.

All Holden luxury vehicles receive the added benefits of Holden Roadside **Ultra** Assist which includes accommodation, alternative transport, rental car, assistance in case of accident, theft and medical emergency and Australia wide vehicle recovery.

Can I upgrade to Roadside Ultra assist?

Yes, owners can upgrade to Holden Roadside **Ultra** Assistance for a fee by dialling 1800 645 668.

ROADSIDE ASSISTANCE cont.

When do the benefits begin?

Cover begins from the date of first registration. An interim card entitles you to immediately receive all the benefits of Holden Roadside Assistance.

Where can I get Roadside Assistance?

Holden Roadside Assistance is available to you at home, or at the roadside, anywhere in Australia, should you need it. In remote or sparsely populated areas you may experience delays in obtaining Roadside Assistance due to your location, the availability of the service provider and accessibility.

Is there a membership or joining fee?

No, Holden Roadside Assistance is complimentary with every new Holden passenger vehicle and light commercial vehicle for 36 months from the date of first registration.

What will Holden Roadside Assistance cost me?

Materials, fuel and spare parts must be paid for at the time of service. The service personnel attending will issue a receipt for these expenses. Reimbursement of expenses covered by Holden's warranty can be claimed by contacting your local Holden Dealer.

What happens if I sell my vehicle?

Holden Roadside Assistance stays with the vehicle, so if you sell your vehicle during the 36 month period, it is still eligible for the balance of the Holden Roadside Assistance. The new owner simply registers for the service by using the change of ownership form supplied in the Roadside Assistance booklet.

How do I call for assistance?

Simply call Holden Roadside Assistance toll free on 1800 817 100 from anywhere in Australia. For further information regarding the service and full terms and conditions, refer to the Roadside Assistance Kit in the glovebox or call the toll free Customer Assistance Service Line on 1800 033 349.

CUSTOMER ASSISTANCE

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.

Normally, any problems with the sales, operation or servicing of your vehicle will be handled by your Holden Dealer's Sales and Service Department.

We realise however that, with the best intentions, misunderstandings do occur sometimes.

Therefore, we suggest you discuss any concern with one of the Holden Dealer's management people. If you haven't received satisfaction from the Sales Manager or Service Manager - go to the General Manager or to the Dealer Principal.

By now you should have satisfaction. If not, the Holden Customer Assistance office is at your disposal.

The Holden Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The Melbourne ~~area~~ number is 9646 5466. Outside the Melbourne Metropolitan area, the number is 1800 03 3349.

If your concern relates to parts/accessories and you have made contact with the Dealer or Distributor without satisfaction, you may contact Holden Service Parts Operations on (03) 9797 7341.

Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

The Manager
Holden Customer Assistance Centre
GPO Box 1714
Melbourne, 3001.

Your letter should clearly outline your concern or query, and include the following:

- Your name and address.
- Telephone numbers, both private & business.
- Servicing Dealership's name and address.
- Vehicle model.
- Vehicle identification number (I.S.O.V.I.N.), refer to the inside front cover of this Handbook.
- Date of purchase.
- Current odometer reading.

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of this Handbook.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

FOR NEW ZEALAND HOLDEN OWNERS

The information in this Owner's Handbook applies primarily to Australian Holden vehicles and there may be some differences to the Warranty and Owner Assistance provisions for New Zealand. Applicable details for New Zealand are set out in the Holden Warranty and Owner Assistance Information booklet enclosed in the New Zealand glovebox wallet.

For your convenience, a list of New Zealand Dealers is provided at the end of this Chapter.

☎ New Zealand Assistance can be reached on:

0800 HOLDEN (0800 465336)

This number provides access to New Zealand Roadside Assistance as well as New Zealand Customer Assistance.

✉ If you prefer to write the address is:

The Manager
Holden Customer Assistance Centre
GPO Box 1714
Melbourne,
Australia, 3001.

AUSTRALIAN HOLDEN DEALERS

N.S.W. Metropolitan

ARNCLIFFE
Suttons Motors Arncliffe P/L
93 Princes Highway
P: (02) 9335 9000 FAX: (02) 9335 9006

ASHFIELD
Muirs Holden
252 Parramatta Road
P: (02) 9798 8888 Fax: (02) 9799 7010

BALGOWLAH
Peninsula Holden Balgowlah
164 Condamine Street
P: (02) 9949 1888 FAX (02) 9949 7237

BANKSTOWN
Peninsula Holden Bankstown
466 Chapel Road
P: (02) 9790 1234 Fax: (02) 9790 0033

BLACKTOWN
West City Holden
120~128 Sunnyholt Road
P: (02) 9622 7333 Fax: (02) 9671 7394

CAMDEN
Camden Holden
33 Edward Street
P: (02) 4655 5000 Fax: (02) 4655 5001

CAMPBELLTOWN
Paul Wakeling Holden
Cnr Blaxland & Campbelltown Rds
P: (02) 4628 1444 Fax: (02) 4628 3262

CASTLE HILL
Windsor Road Holden
Cnr Victoria Ave/Windsor Rd
P: (02) 9894 6666 Fax: (02) 9894 5600

CHULLORA
Suttons Motors (Chullora) P/L
Cnr Hume Hwy/Waterloo Rd
P: (02) 9642 0233 Fax: (02) 9642 7798

DEE WHY
Peninsula Holden Dee Why
Cnr May & Mooramba Roads
P: (02) 9982 1311 Fax: (02) 9982 3755

EAST SYDNEY
Suttons City Holden
137-157 Bourke Street
P: (02) 9357 4222 Fax: (02) 9358 5542

GORDON
Sundell Holden
Cnr Pacific Hwy/McIntyre St
P: (02) 9498 7766 Fax: (02) 9498 2906

HOMEBUSH
Suttons Motors Homebush P/L
112 Parramatta Road
P: (02) 9746 4500 Fax: (02) 9746 7206

LAKEMBA
United Holden Lakemba
817 Canterbury Road
P: (02) 9740 5555 Fax: (02) 9740 5907

LANSVALE
Lansvale Holden
266~284 Hume Highway
P: (02) 9728 7333 Fax: (02) 9726 1085

LIVERPOOL
McGrath Holden
411~419 Hume Highway
P: (02) 9821 5000 Fax: (02) 9821 1993

NEWPORT
Newport Car Care Centre
340 Barrenjoey Road
P: (02) 9999 1254

PARRAMATTA
Boyded Holden Parramatta
65 Church Street
P: (02) 9204 6666 Fax: (02) 9635 6346

PENNANT HILLS
Barry Smith Holden
343~355 Pennant Hills Road
P: (02) 9843 3333 Fax: (02) 9484 7475

PENRITH
Penrith City Holden
Cnr Henry St & Evan Street
P: (02) 4732 1966 Fax: (02) 4721 5896

ROCKDALE
United Holden Rockdale
571 Princes Hwy
P: (02) 9567 0321 Fax: (02) 9597 7395

ROSEBERY
Suttons City Holden
Link Road
P: (02) 9931 3000 Fax: (02) 9931 3001

RYDE
Hunter Holden
603~605 Victoria Road
P: (02) 9808 9123 Fax: (02) 9809 6592

SPRINGWOOD
Springwood Holden
15 Ferguson Road
P: (02) 4751 1911 Fax: (02) 4751 2481

ST LEONARDS
Hunter Holden
4 Herbert Street
P: (02) 9906 4044 Fax: (02) 9439 4635

ST. MARY'S
John Young Holden
Cnr Glossop & Harris Streets
P: (02) 9673 2111 Fax: (02) 9673 4932

SUTHERLAND
McGrath Holden Sutherland
499~505 Princes Highway
P: (02) 9545 4811 Fax: (02) 9545 2533

AUSTRALIAN HOLDEN DEALERS CONT.

WAITARA
Suttons Motors Waitara P/L
90 Pacific Hwy
P: (02) 9487 2222 Fax: (02) 9489 0009

WINDSOR
Hawkesbury Valley Holden
18 Macquarie Street
P: (02) 4577 4077 Fax: (02) 4577 2592

N.S.W. Country

ARMIDALE
New State Motors
103 Rusden Street
P: (02) 6772 9444 Fax: (02) 6772 5836

BALLINA
Quayside Motors
Pacific Highway
P: (02) 6686 5111 Fax: (02) 6686 8574

BARHAM
Hall's Motors Pty Ltd
44 Noorong Street
P: (03) 5453 2092 Fax: (03) 5453 1064

BATEMAN'S BAY
Surfair Holden
30-32 Orient Street
P: (02) 4472 5111

BATHURST
Bathurst Holden
54 Durham Street
P: (02) 6331 2077 Fax: (02) 6331 9177

BEGA
Bega Valley Holden
Cnr Upper and Gibbs Sts
P: (02) 6492 2333 Fax: (02) 6492 3105

BLAYNEY
Blayney Holden
98 Adelaide Street
P: (02) 6368 2745 Fax: (02) 6368 3257

BOMBALA
Delcott Engineering Pty Ltd
Maybe Street
P: (02) 6458 3341 Fax: (02) 6458 3940

BOOROWA
Boowowa Auto Repairs
40 Marsden Street
P: (02) 6385 3305

BREWARRINA
Lukas Holden
Bathurst Street
P: (02) 6839 2105 Fax: (02) 6839 2454

BROKEN HILL
Donlee Motors Pty Ltd
Cnr Galena & Rakow Streets
P: (08) 8087 2463 Fax: (08) 8087 7971

CANOWINDRA
Canowindra Motors
Gaskill Street
P: (02) 6344 1105 Fax: (02) 6344 1105

CARDIFF
Brian Kelly Holden
35~39 MacQuarie Road
P: (02) 4954 7733 Fax: (02) 4954 9407

CASINO
Casino Holden
142 Barker Street
P: (02) 6662 2822 Fax: (02) 6662 2101

CESSNOCK
Geoff Boyd Holden
Cnr Wollombi Road and Darwin Street
P: (02) 4990 3800 Fax: (02) 4991 1544

COBAR
Cobar Holden
Cnr Lewis St & Louth Road
P: (02) 6836 4005 Fax: (02) 6836 3409

COFF'S HARBOUR
Geoff King Holden
Cnr Pacific Hwy and Thompson Road
P: (02) 6652 2288 Fax: (02) 6652 5360

COOMA
Summit Holden
66~70 Sharp Street
P: (02) 6452 1077 Fax: (02) 6452 1142

COONABARABRAN
Coonabarabran Holden
24 Charles Street
P: (02) 6842 1499 Fax: (02) 6842 2473

COONAMBLE
Moody's Motors
37 Aberford Street
P: (02) 6822 1161 Fax: (02) 6822 1624

COOTAMUNDRA
Jenkins Garage
111 Wallendoon Street
P: (02) 6942 2522 Fax: (02) 6942 1493

COWRA
Waugoola Motors Pty Ltd
Kendal Street
P: (02) 6342 1800 Fax: (02) 6342 3614

CROOKWELL
Crookwell Autos
114 Goulburn Street
P: (02) 4832 1433 Fax: (02) 4832 2157

DENILIQUIN
Burchfield Bros & Co
112~114 End Street
P: (03) 5881 2133 Fax: (03) 5881 3322

DORRIGO
Phil Noble Motors
46~48 Hickory Street
P: (02) 6657 2017 Fax: (02) 6657 2217

AUSTRALIAN HOLDEN DEALERS cont.

DUBBO
John Kierath
54 Bourke Street
P: (02) 6882 1011 Fax: (02) 6882 7102

DUNGOG
Turner Holden
248 Dowling Street
P: (02) 4992 1816 Fax: (02) 4992 1833

EDEN
Ron Doyle
113 Princes Highway
P: (02) 6496 1420 Fax: (02) 6496 1467

FINLEY
Riverina Garage Finley
104 Murray Street
P: (03) 5883 1211 Fax: (03) 5883 1638

FORBES
Frank Spice Holden
20~22 Dowling Street
P: (02) 6851 1755 Fax: (02) 6852 2825

GATESHEAD
Brian Kelly Holden
39 Pacific Highway
P: (02) 4920 7000 Fax: (02) 4920 8008

GILGANDRA
Gilgandra Holden
3 Morris Street
P: (02) 6847 1888 Fax: (02) 6847 1277

GLEN INNES
Glen Severn Holden
167 Grey Street
P: (02) 6732 2888 Fax: (02) 6732 3394

GOSFORD
Noble Holden
Pacific Highway
P: (02) 4325 0511 Fax: (02) 4324 1043

GOULBURN
Geissler Motors
279~298 Auburn Street
P: (02) 4821 3744 Fax: (02) 4821 9798

GRAFTON
Ken Casson Holden
37~39 Turf Street
P: (02) 6642 6666 Fax: (02) 6642 6737

GRENFELL
Peter Mellon Motors
40 Alexandra Street
P: (02) 6343 1522 Fax: (02) 6343 1347

GRIFFITH
Leo Franco Holden
164~166 Yambil Street
P: (02) 6964 2977 Fax: (02) 6962 4916

GUNNEDAH
Namoi Valley Motors
48 Barber Street
P: (02) 6742 0211 Fax: (02) 6742 3842

HARDEN
Ginty & O'Leary
Cnr Station & Albury Streets
P: (02) 6386 2320 Fax: (02) 6386 2722

HAY
Royce Curtis Motors
168 Lachlan Street
P: (02) 6993 1503 Fax: (02) 6993 2212

HOLBROOK
Lieschke Motors Pty Ltd
78 Albury Street
P: (02) 6036 2244 Fax: (02) 6036 2831

INVERELL
Gaukroger Sales Pty Ltd
Vivian Street
P: (02) 6722 2722 Fax: (02) 6722 1804

JERILDERIE
Jerilderie Motors
Jerilderie Street
P: (03) 5886 1302 Fax: (03) 5886 1734

KANDOS
Chrisfield Holden
11 Angus Street
P: (02) 6379 4204 Fax: (02) 6379 4606

KATOOMBA
Katoomba Holden
136 Great Western Highway
P: (02) 4732 1966 Fax: (02) 4782 5546

KEMPSEY
Thoroughgood Holden
118~132 Belgrave Street
P: (02) 6562 1381 Fax: (02) 6562 1383

KIAMA
Glen Fulton Holden
35~41 Collins Street
P: (02) 4232 1888 Fax: (02) 4232 3062

KYOGLE
O & H Holden
128~134 Summerland Way
P: (02) 6632 1711 Fax: (02) 6632 2552

LEETON
John Ryan Holden
47~51 Pine Avenue
P: (02) 6953 2466 Fax: (02) 6953 6725

LISMORE
John Chant Motors Pty Ltd
Carrington Street
P: (02) 6621 2601 Fax: (02) 6622 4659

LITHGOW
Lithgow City Holden
255 Main Street
P: (02) 6351 4555 Fax: (02) 6351 4653

MACKSVILLE
Eastland Auto Centre
18~22 Cooper Street
P: (02) 6568 1711 Fax: (02) 6568 1816

AUSTRALIAN HOLDEN DEALERS cont.

MACLEAN
O'Halloran Motors
175 River Street
P: (02) 6645 2844 Fax: (02) 6645 4003

MAITLAND
Heritage Holden
Cnr New England Hwy & Bungaree St
P: (02) 4932 0779 Fax: (02) 4932 0473

MOREE
Keith Haddad Holden
Cnr Boston & Heber Streets
P: (02) 6752 1855 Fax: (02) 6752 1298

MORUYA
Surfair Holden
88 Vulcan Street
P: (02) 4474 2555 Fax: (02) 4474 2129

MOSS VALE
Moss Vale Holden
160~162 Argyle Street
P: (02) 4868 1055 Fax: (02) 4868 3330

MULLUMBIMBY
Tony Carsburg Holden
2 Argyle Street
P: (02) 6684 2066 Fax: (02) 6684 4593

MUDGEE
Ross Granata Motors
32 Sydney Road
P: (02) 6372 1766 Fax: (02) 6372 3735

MURWILLUMBAH
Tweed Motors
29 Prospero Street
P: (02) 6672 4444 Fax: (02) 6672 5811

MUSWELLBROOK
Upper Hunter Motors Pty Ltd
116 Bridge Street
P: (02) 6543 2577 Fax: (02) 6543 2565

NARRABRI
Allan Cooper Holden
181 Maitland Street
P: (02) 6792 3488 Fax: (02) 6792 4750

NARROMINE
Terry Green Holden
45~51 Dandaloo Street
P: (02) 6889 1244 Fax: (02) 6889 2277

NEWCASTLE
Newcastle City Holden
King Street (Cnr Stewart Ave)
P: (02) 4961 5301 Fax: (02) 4961 6485

NOWRA
Glendon Motors Holden
301~313 Princes Highway
P: (02) 4421 0144 Fax: (02) 4423 0854

ORANGE
Canobolas Holden
348 Summer Street
P: (02) 6362 0155 Fax: (02) 6361 3702

PARKES
Broderick Motors Holden
Cnr Mitchell & Clarinda Sts
P: (02) 6862 2266 Fax: (02) 6862 1406

PEAK HILL
S. Leary & Sons Pty Ltd
Mingelo Street
P: (02) 6869 1459 Fax: (02) 6869 1999

PORT MACQUARIE
Bob Todd Motors Pty Ltd
115 Gordon Street
P: (02) 6583 1100 Fax: (02) 6584 9508

QUIRINDI
Browning Motors
82 Henry Street
P: (02) 6746 1666 Fax: (02) 6746 1422

SCONE
Upper Hunter Motors (Scone)
100 Liverpool Street
P: (02) 6545 1355

SINGLETON
Lancaster Holden
80 John Street
P: (02) 6578 8700 Fax: (02) 6578 8733

TAMWORTH
Kensell's Holden
Cnr Bourke St & Kable Ave
P: (02) 6766 6699 Fax: (02) 6766 7339

TAREE
Hardes Holden
21~25 Victoria Street
P: (02) 6552 2222 Fax: (02) 6552 1269

TEMORA
Rod Lovering Holden
607-608 Stockinbingal Road
P: (02) 6977 2255 Fax: (02) 6977 2033

TENTERFIELD
Sexton & Green (Sales & Service) P/L
148 Rouse Street
P: (02) 6736 1855 Fax: (02) 6736 1946

TUMUT
Harry Kell & Sons Pty. Ltd
Cnr. Merrivale & Russell Streets
P: (02) 6947 2293 Fax: (02) 6947 3763

TUNCURRY
Great Lakes Holden
144 Manning Street
P: (02) 6555 6644 Fax: (02) 6555 7433

TWEED HEADS
Tweed Motors
75~79 Pacific Highway
P: (07) 5536 3411 Fax: (07) 5536 4490

ULLADULLA
Alan May Holden
169 Princes Highway
P: (02) 4455 1166 Fax: (02) 4455 4122

AUSTRALIAN HOLDEN DEALERS cont.

WAGGA WAGGA
Wagga Motors Pty Ltd
32 Dobney Avenue
P: (02) 6925 3411 Fax: (02) 6925 3283

WALCHA
Bowden's Holden Walcha
18 Derby Street
P: (02) 6777 2226 Fax: (02) 6777 2319

WALGETT
Walgett Garage Pty Ltd
81 Wee Waa Street
P: (02) 6828 1088 Fax: (02) 6828 1198

WALLA WALLA
D.E. Lieschke & Son Pty Ltd
63 Commercial Road
P: (02) 6029 2202 Fax: (02) 6029 2134

WARIALDA
Roger Moore
Hope Street
P: (02) 6729 1570 Fax: (02) 6729 1104

WARILLA
Wilson's Holden
29 Shellharbour Road
P: (02) 4295 1223 Fax: (02) 4296 1007

WARREN
Fuller Bros
Dubbo Street
P: (02) 6847 4978 Fax: (02) 6847 4477

WELLINGTON
Gersbach's Garage Pty Ltd
92 Lee Street
P: (02) 6845 2733 Fax: (02) 6845 3236

WEST WYALONG
West Wyalong Motors
183 Main Street
P: (02) 6972 2388 Fax: (02) 6972 2570

WOLLONGONG
Dwyers City Holden
31~33 Crown Street
P: (02) 4229 9222 Fax: (02) 4229 5105

WYONG
Barry Robertson Holden
172 Pacific Highway
P: (02) 4351 2588 Fax: (02) 4352 1759

YASS
Bill Nesbitt Holden
221 Comur Street
P: (02) 6226 1866 Fax: (02) 6226 1747

YOUNG
Harden & Geelan Holden
48 Boorowa Street
P: (02) 6382 1155 Fax: (02) 6382 4673

A.C.T.

BELCONNEN
Gerald Slaven Holden
Josephson Street
P: (02) 6251 5111 Fax: (02) 6253 1298

BRADDON
Rolfe Holden
44 Mort Street
P: (02) 6248 7888 Fax: (02) 6257 1328

PHILLIP
Commonwealth Motors Pty Ltd
158 Melrose Drive
P: (02) 6282 3522 Fax: (02) 6282 5214

Tas.

BURNIE
Motors Burnie
Marine Terrace
P: (03) 6431 1122 Fax: (03) 6431 3146

DEVONPORT
Motors Devonport
Victoria Parade
P: (03) 6424 4033 Fax: (03) 6424 5249

HOBART
Motors Pty Ltd
179 MacQuarie Street
P: (03) 6220 1171 Fax: (03) 6223 8117

KING ISLAND
King Island Motors Pty Ltd
Netherby Road, Currie
P: (03) 6462 1155 Fax: (03) 6462 1488

LAUNCESTON
Motors Launceston
93~95 Elizabeth Street
P: (03) 6332 9101 Fax: (03) 6334 5245

Vic. Metropolitan

BERWICK
Barry Bourke Holden
755 Princes Highway
P: (03) 9707 2222 Fax: (03) 9707 3091

BUNDOORA
Watson Holden
413 Grimshaw Street
P: (03) 9467 4677 Fax: (03) 9467 5744

BURWOOD
Penfold Holden
142 Burwood Highway
P: (03) 9268 1333 Fax: (03) 9268 1335

CHELSEA
Harrison Holden
370 Nepean Highway
P: (03) 9772 2233 Fax: (03) 9772 2190

AUSTRALIAN HOLDEN DEALERS cont.

CHELTENHAM
Booran Holden
1212 Nepean Highway
P: (03) 9584 3333 Fax: (03) 9584 4285

DANDENONG
Booran Holden
17 Lonsdale Street
P: (03) 9794 5455 Fax: (03) 9792 4871

DONCASTER
Doncaster Holden
636~640 Doncaster Road
P: (03) 9840 0188 Fax: (03) 9840 2587

ELSTERNWICK
Reg Hunt Holden
63 Nepean Highway
P: (03) 9528 2222 Fax: (03) 9528 1088

ESSENDON
Preston Motors (Essendon) P/L
205~211 Keilor Road
P: (03) 9374 2888 Fax: (03) 9379 6754

FAWKNER
Mantello Holden
1263 Sydney Road
P: (03) 9359 1333 Fax: (03) 9359 9334

FERNTREE GULLY
Ferntree Gully Holden
980 Burwood Highway
P: (03) 9758 2222 Fax: (03) 9758 3435

FOOTSCRAY
Alan Mance Holden
435 Barkly Street
P: (03) 9687 4222 Fax: (03) 9687 7529

FRANKSTON
Bay City Holden
140 Dandenong Road
P: (03) 9784 4444 Fax: (03) 9784 4419

GEELONG
R & B Smith Holden
510 Moorabool Street
P: (03) 5222 2888 Fax: (03) 5221 3114

GEELONG
Winter & Taylor (Sales) P/L
23 Cavendish Street
P: (03) 5222 1811 Fax: (03) 5221 1873

GLENHUNTLY
Booran Holden
1234 Glenhuntly Road
P: (03) 9571 9313 Fax: (03) 9571 8374

GLEN WAVERLEY
Geoff Brady Holden
565~577 Springvale Road
P: (03) 9550 5888 Fax: (03) 9550 5855

HASTINGS
John Collins Holden
2041 Frankston-Flinders Road
P: (03) 5979 4433 Fax: (03) 5975 4720

LILYDALE
Heritage Holden
344 Main Street
P: (03) 9735 5566 Fax: (03) 9735 1040

MELTON
Alan Mance Holden
1 Holland Drive
(03) 9746 9666 Fax: (03) 9746 9555

MORNINGTON
John Collins Holden
976 Nepean Highway
P: (03) 5975 4433 Fax: (03) 5975 4720

OAKLEIGH
Garry & Warren Smith
1575 Dandenong Road
P: (03) 9568 6333 Fax: (03) 9568 5691

PRESTON
Ralph D'Silva Holden
573~603 High Street
P: (03) 9471 0500 Fax: (03) 9478 4210

RINGWOOD
Patterson Cheney Holden
45~57 Maroondah Highway
P: (03) 9262 6666 Fax: (03) 9870 1113

SOUTH MELBOURNE
South City Holden
380 City Road
P: (03) 9627 3333 Fax: (03) 9682 6888

SOUTH YARRA
Penfold Holden
681 Chapel Street
P: (03) 9827 2272 Fax: (03) 9826 5328

SUNBURY
Sunbury Holden
93~95 Horne Street
P: (03) 9740 3000 Fax: (03) 9740 4777

SUNSHINE
Kevin Dennis Holden
272 Ballarat Road
P: (03) 9292 9292 Fax: (03) 9292 9200

WERRIBEE
Ballan Holden
56 Princes Highway
P: (03) 9741 2222 Fax: (03) 9742 3797

WEST MELBOURNE
Reg Hunt Holden
577 King Street
P: (03) 9329 6611 Fax: (03) 9329 1550

Vic. Country

ALEXANDRA
GK & JH Radford
120 Grant Street
P: (03) 5772 1588 Fax: (03) 5772 1978

AUSTRALIAN HOLDEN DEALERS cont.

ARARAT
David Reid Motors
High Street
P: (03) 5352 4100 Fax: (03) 5352 4388

BAIRNSDALE
The Big Garage
199 Main Street
P: (03) 5152 4131 Fax: (03) 5152 5313

BALLARAT
Peter Amor Motors
211 Gillies Street
P: (03) 5339 9333 Fax: (03) 5339 9202

BENALLA
Arnott's Motors
88~90 Bridge Street
P: (03) 5762 2500 Fax: (03) 5762 1586

BENDIGO
Ron Poyser Holden
Cnr High & Myrtle Streets
P: (03) 5442 3999 Fax: (03) 5442 7766

BIRCHIP
R.L. & C.J. Bales
38 Cumming Avenue
P: (03) 5492 2543

BOORT
Jaron Motors
55 Godfrey Street
P: (03) 5455 2008 Fax: (03) 5455 2008

CAMPERDOWN
Camperdown Auto Parts
96 Manifold Street
P: (03) 5593 1983 Fax: (03) 5593 1979

CASTERTON
Coxons Holden
139 Henty Street
P: (03) 5581 1166 Fax: (03) 5581 2116

CHARLTON
K.V. Charlton
70 High Street
P: (03) 5491 1444 Fax: (03) 5491 1984

COBRAM
Neville Mustica Motors
Murray Valley Hwy
P: (03) 5872 1666 Fax: (03) 5872 1920

COHUNA
Hare Motors Holden
105~107 King George Street
P: (03) 5456 4488 Fax: (03) 5456 4448

COLAC
Parker Bros. Motor Co
224 Murray Street
P: (03) 5231 5533 Fax: (03) 5231 3853

DAYLESFORD
K.R. Little
Vincent Street
P: (03) 5348 2248

DIMBOOLA
Westerfield Motors Pty Ltd
64 Lloyd Street
P: (03) 5389 1302

DONALD
O.A. Shilton & Sons Pty Ltd
5 Woods Street
P: (03) 5497 1400 Fax: (03) 5497 1505

ECHUCA
Echuca Motors
1 Nothern Highway
P: (03) 5482 1522 Fax: (03) 5480 6215

FOSTER
Ray Dower Motors
78 Main Street
P: (03) 5682 2404

HAMILTON
Blood Auto Group Pty Ltd
210 Gray Street
P: (03) 5572 1433 Fax: (03) 5571 1182

HOPETOUN
Hopetoun Motors
78 Lascelles Street
P: (03) 5083 3143 Fax: (03) 5083 3290

HORSHAM
Ivan Morrow Motors Pty Ltd
22 O'Callaghans Parade
P: (03) 5382 0185 Fax: (03) 5382 0459

KANIVA
Kaniva Motors
82 Commercial Street
P: (03) 5392 2300 Fax: (03) 5392 2589

KOO WEE RUP
G & J Light Mechanical Repairs P/L
Station Road
P: (03) 5997 1325

KORUMBURRA
Peter Dunlevie Holden
42 Commercial Street
P: (03) 5655 1288 Fax: (03) 5655 1839

KYABRAM
D'Alberto Holden
60 McEwen Road
P: (03) 5852 1366 Fax: (03) 5852 1337

KYNETON
Mollison Motors Pty Ltd
167 Mollison Street
P: (03) 5422 3377 Fax: (03) 5422 3501

LEONGATHA
Gleeson Holden
37~43 Bair Street
P: (03) 5662 2361 Fax: (03) 5662 3393

MANSFIELD
Martin's Garage
52~54 Chenery Street
P: (03) 5775 2610 Fax: (03) 5775 1179

AUSTRALIAN HOLDEN DEALERS cont.

MARYBOROUGH
Graham Jacka Holden
35 Nolan Street
P: (03) 5461 1011 Fax: (03) 5461 4789

MILDURA
Stuart & Harrison (Sales) Pty Ltd
24~32 Deakin Avenue
P: (03) 5023 0051 Fax: (03) 5021 3076

MORTLAKE
W. Christian (Mortlake) Pty Ltd
107 Dunlop Street
P: (03) 5599 2301 Fax: (03) 5599 2567

MURRAYVILLE
Peers Motors
McKenzie Street
P: (03) 5095 2081 Fax: (03) 5095 2054

NATHALIA
BHB Motors
6 Blake Street
P: (03) 5866 2660

NHILL
Ivan Morrow Motors Pty Ltd
71~73 Nelson Street
P: (03) 5391 1333 Fax: (03) 5391 1228

NULLAWIL
Nullawil Motors & General Engineers
Calder Highway
P: (03) 5493 5210 Fax: (03) 5493 5210

ORBOST
Merlin Motors
Stanley Street
P: (03) 5154 1909

PORTLAND
Reynolds of Portland
Henty Highway
P: (03) 5523 1688 Fax: (03) 5523 6299

QUAMBATOOK
Quambatook Auto Services
32 Gutherie Street
P: (03) 5457 1237 Fax: (03) 5457 1420

ROCHESTER
Bruce Hocking Motors Pty Ltd
71 Moore Street
P: (03) 5484 1455 Fax: (03) 5484 1140

RUTHERGLEN
Jasper Bros Pty Ltd
62 Main Street
P: (02) 6032 8404 Fax: (02) 6032 8156

SALE
Sam Gould Holden
273 York Street
P: (03) 5144 3944 Fax: (03) 5144 6289

SEALAKE
Paddy Smith Holden
Calder Highway
P: (03) 5070 1147

SEYMOUR
Neil Beer Holden
49 Emily Street
P: (03) 5792 2777 Fax: (03) 5792 4111

SHEPPARTON
Parker Bros. Auto Co.
Benalla Road
P: (03) 5822 2666 Fax: (03) 5831 2507

STAWELL
Howden Holden
72~76 Longfield Street
P: (03) 5358 1888 Fax: (03) 5358 3954

SWAN HILL
Swan Hill Holden
94~102 Campbell Street
P: (03) 5033 1800 Fax: (03) 5032 2468

TALLANGATTA
Crispin Motors
21 Towong Street
P: (02) 6071 2414 Fax: (02) 6071 2655

TIMBOON
Timboon Motors
56 Bailey Street
P: (03) 5598 3007 Fax: (03) 5598 3362

TRARALGON
Colin Watson Holden
Princes Highway
P: (03) 5174 8000 Fax: (03) 5175 0050

UNDERBOOL
A.J. Gloster & Sons
Cotter Street
P: (03) 5094 6291 Fax: (03) 5094 6297

WANGARATTA
Alan Capp (New Cars) Pty Ltd
29 Tone Road
P: (03) 5721 2133 Fax: (03) 5721 4626

WARRACKNABEAL
Amor Motors Aubrey Truck Sales
33 Woolcock Street
P: (03) 5394 1055 Fax: (03) 5398 1904

WARRAGUL
Vin Rowe Holden
3 Endeavour Street
P: (03) 5623 1362 Fax: (03) 5623 4314

WARRNAMBOOL
Callaghan Motors Pty Ltd
133~137 Fairy Street
P: (03) 5562 3711 Fax: (03) 5562 7415

WODONGA
McRae White Motors
182 Melbourne Road
P: (02) 6056 2333 Fax: (02) 6024 7899

WONTHAGGI
Wonthaggi Holden
2 Murray Street
P: (03) 5672 1122 Fax: (03) 5672 4141

AUSTRALIAN HOLDEN DEALERS cont.

YARRAM
John Palmer Holden
150 Commercial Road
P: (03) 5182 5122 Fax: (03) 5182 6166

YARRAWONGA
Pigdons Pty Ltd
155 Belmore Street
P: (03) 5743 1577 Fax: (03) 5744 1788

Qld. Metropolitan

ASPLEY
Zupps Aspley Pty Ltd
1454 Gympie Road
P: (07) 3246 8000 Fax: (07) 3263 7036

Browns Plains
Zupps Hillcrest
Cnr Mt Lindsay Highway & Corporate Place
P: (07) 3802 4000 Fax: (07) 3802 4099

CAPALABA
Oldfield Holden
103 Redland Bay Road
P: (07) 3245 2200 Fax: (07) 3245 2221

INDOOROOPILLY
Westpoint Holden
440 Moggill Road
P: (07) 3378 6622 Fax: (07) 3878 1340

IPSWICH
Ross Llewellyn Holden
246 Brisbane Road
P: (07) 3282 2922 Fax: (07) 3282 6359

LAIDLEY
Buhse's Garage
5 Spicer Street
P: (07) 5465 1406 Fax: (07) 5465 1706

MOOROOKA
John Sivyer Holden
1060 Ipswich Road
P: (07) 3892 3344 Fax: (07) 3848 8866

MT. GRAVATT
Zupps Motors Pty Ltd
1310 Logan Road
P: (07) 3877 0000 Fax: (07) 3877 0066

NEWSTEAD
Eagers Retail Pty Ltd
95 Breakfast Creek Road
P: (07) 3364 1199 Fax: (07) 3364 1060

PETRIE
Village Motors
1059 Gympie Road
P: (07) 3285 2244 Fax: (07) 3285 1975

REDCLIFFE
Village Holden
425 Elizabeth Avenue
P: (07) 3284 7344 Fax: (07) 3883 2711

SPRINGWOOD
Motorama Holden
3455 Pacific Highway
P: (07) 3804 4888 Fax: (07) 3208 7018

WINDSOR
Leach Holden
143 Newmarket Road
P: (07) 3357 6711 Fax: (07) 3357 5403

WOOLLOONGABBA
Armstrong Holden
73 Ipswich Road
P: (07) 3891 5522 Fax: (07) 3891 5146

WYNNUM
Doug Barton Holden
200 Tingal Road
P: (07) 3396 7777 Fax: (07) 3393 3593

Qld. Country

ATHERTON
Redding Motors Pty Ltd
2 Cook Street
P: (07) 4091 1344 Fax: (07) 4091 2039

AYR
Honeycombes Sales & Service
213~217 Queen Street
P: (07) 4783 2344 Fax: (07) 4783 2079

BEAUDESERT
Lawson Holden
57 Brisbane Street
P: (07) 5541 2000 Fax: (07) 5541 3368

BILOELA
Andersons Auto City
Dawson Highway
P: (07) 4992 2833 Fax: (07) 4992 3066

BOWEN
McDermott Holden
98 Herbert Street
P: (07) 4786 1430 Fax: (07) 4786 2903

BUNDABERG
Ross Gray Holden
Takalvan Street
P: (07) 4150 1333 Fax: (07) 4150 1318

CABOOLTURE
Beecham Holden
Bribie Island Road
P: (07) 5495 1477 Fax: (07) 5495 2839

CAIRNS
Ireland Holden
227~233 Mulgrave Road
P: (07) 4052 3666 Fax: (07) 4052 3606

CALOUNDRA
Caloundra City Holden
45 Caloundra Road
P: (07) 5491 5522 Fax: (07) 5491 8016

AUSTRALIAN HOLDEN DEALERS cont.

CHARLEVILLE
Alan Dobbin Holden
129 Alfred Street
P: (07) 4654 1737 Fax: (07) 4654 3254

CHARTERS TOWERS
Peters Holden
57 Mosman Street
P: (07) 4787 1177 Fax: (07) 4787 4858

CHINCHILLA
Ainsworth Motors & Machinery Pty Ltd
55 Chinchilla Street
P: (07) 4662 7286 Fax: (07) 4662 7197

CROWS NEST
Dennis Nissen Motors
14 William Street
P: (07) 4698 1300 Fax: (07) 4698 1495

DALBY
Johnson's Holden
36 Drayton Street
P: (07) 4662 2422 Fax: (07) 4662 4311

EMERALD
Orion Holden
Hospital Road
P: (07) 4980 7622 Fax: (07) 4982 2791

GATTON
Gatton Auto Centre
67 Railway Street
P: (07) 5462 1633 Fax: (07) 5462 1980

GLADSTONE
Andersons Auto City
56 Yarroon Street
P: (07) 4972 1177 Fax: (07) 4972 9141

GOONDIWINDI
Carpro
Cnr Lagoon & West Streets
P: (07) 4671 2170 Fax: (07) 4671 2013

GYMPIE
Madills Holden
35 Mellor Street
P: (07) 5482 2522 Fax: (07) 5482 2672

HERVEY BAY
Whitaker Holden
96 Torquay Road
P: (07) 4128 1722

INGHAM
Devietti Holden
99 Lannercost Street
P: (07) 4776 1599 Fax: (07) 4776 3547

INNISFAIL
I.C. Taylor Pty Ltd
117 Edith Street
P: (07) 4061 1577 Fax: (07) 4061 3963

JULIA CREEK
Julia Creek Motors Pty Ltd
Burke Street
P: (07) 4746 7155 Fax: (07) 4746 7197

KILCOY
Hobart's Garage
58 Mary Street
P: (07) 5497 1204 Fax: (07) 5497 1204

KINGAROY
John Dundas Pty Ltd
38 King Street
P: (07) 4162 1722 Fax: (07) 4162 3756

LONGREACH
Longreach Motors
33 Swan Street
P: (07) 4658 1700 Fax: (07) 4658 1857

MACKAY
Pioneer Holden
Cnr Gordon & Wellington Streets
P: (07) 4969 4299 Fax: (07) 4969 4288

MAROOCHYDORE
Sunco Holden
Wises Road
P: (07) 5443 7644 Fax: (07) 5443 7645

MARYBOROUGH
Whitaker Holden
109~111 March Street
P: (07) 4122 2255 Fax: (07) 4123 1912

MOUNT ISA
Barkly Motors Pty Ltd
Marian Street
P: (07) 4743 3044 Fax: (07) 4743 8466

MURGON
Clifton Motors
Macalister Street
P: (07) 4168 1066 Fax: (07) 4168 1947

NAMBOUR
Sunco
Bruce Highway
P: (07) 5451 2000 Fax: (07) 5451 2099

NAMBOUR
Kallenbach Motors
139 Howard Street
P: (07) 5441 3099 Fax: (07) 5441 3105

NANANGO
Nanango Motors Pty Ltd
102 Drayton Street
P: (07) 4163 1108 Fax: (07) 4163 1108

NOOSAVILLE
Madills Noosa
Lot 1 Lionel Donovan Drive
P: (07) 5449 7900 Fax: (07) 5474 0073

PROSERPINE
Crossley Car Sales Whitsunday Pty Ltd
162~164 Main Street
P: (07) 4945 1822 Fax: (07) 4945 2022

ROBINA
Smith's Robina Holden
16 Brabham Circuit
P: (07) 5575 0500 Fax: (07) 5562 1072

AUSTRALIAN HOLDEN DEALERS cont.

ROCKHAMPTON
Lawrence's
327 Richardson Road
P: (07) 4930 5111 Fax: (07) 4930 5112

ROMA
Maranoa Multi Agencies
Bowen Street
P: (07) 4622 2900 Fax: (07) 4622 1832

SOUTHPORT
Lockhart Holden
Cnr Nerang Road & Olsen Avenue
P: (07) 5597 2900 Fax: (07) 5597 2542

SPRINGSURE
Springsure Motors
Eclipse Street
P: (07) 4984 1177 Fax: (07) 4984 1361

ST. GEORGE
Halpin Motors
39~41 Grey Street
P: (07) 4625 5466 Fax: (07) 4625 5855

STANTHORPE
Central Motors
42 Maryland Street
P: (07) 4681 2200 Fax: (07) 4681 1479

TOOWOOMBA
Toowoomba Holden
Cnr James & Hume Streets
P: (07) 4690 0900 Fax: (07) 4690 0909

TOWNSVILLE
Tony Ireland Holden
87~91 Charters Towers Road
P: (07) 4726 7777 Fax: (07) 4721 1486

TULLY
Island Coast Holden
Bruce Highway
P: (07) 4068 1288 Fax: (07) 4068 2145

WARWICK
Deighton Motors Pty Ltd
Grafton Street
P: (07) 4661 2266 Fax: (07) 4661 1275

N.T.

ALICE SPRINGS
Kittles Holden
Cnr Wills & Railway Terrace
P: (08) 8952 1155 Fax: (08) 8953 1556

DARWIN
Kerry Holden
21~25 Stuart Highway
P: (08) 8980 8080 Fax: (08) 8980 8081
KATHERINE
Kittles Holden
441 Victoria Highway
P: (08) 8972 1788 Fax: (08) 8971 0209

TENNANT CREEK
Kittles Holden
Paterson Street
P: (08) 8962 2251 Fax: (08) 8962 2527

S.A. Metropolitan

ADELAIDE
City Holden
223 Grenfell Street
P: (08) 8223 7666 Fax: (08) 8359 2588

ELIZABETH
Peter Page Holden
17 Elizabeth Way
P: (08) 8255 1288 Fax: (08) 8255 9260

MALVERN
Claridge Holden
361~367 Unley Road
P: (08) 8272 1600 Fax: (08) 8373 0057

PORT ADELAIDE
Smiths of Port Adelaide
271 Commercial Road
P: (08) 8341 2255 Fax: (08) 8341 2233

REYNELLA
Southgate Holden
49~59 Main South Road
P: (08) 8381 9555 Fax: (08) 8381 6274

SOMERTON PARK
Hamilton Holden
278~288 Brighton Road
P: (08) 8296 4866 Fax: (08) 8296 7112

THEBARTON
Metro Holden
1 Port Road
P: (08) 8354 9555 Fax: (08) 8443 6855

VALLEY VIEW
Plaza Holden
817~839 North East Road
P: (08) 8263 4922 Fax: (08) 8265 5200

S.A. Country

BALAKLAVA
Balaklava Motors
4 Wallace Street
P: (08) 8862 1030 Fax: (08) 8862 2000

BERRI
Rosenthal Bros Pty Ltd
Vaughan Terrace
P: (08) 8582 3644 Fax: (08) 8582 3515

BORDERTOWN
Farmer's Centre
South Terrace
P: (08) 8752 0266 Fax: (08) 8752 0233

AUSTRALIAN HOLDEN DEALERS cont.

CEDUNA
Beck Motors Pty Ltd
Poynton Street
P: (08) 8625 2616 Fax: (08) 8625 3201

CLARE
Mid North Motor Company
7 Old North Road
P: (08) 8842 2200 Fax: (08) 8842 2886

CLEVE
Herbert Motors Pty Ltd
Rudall Road
P: (08) 8628 2150 Fax: (08) 8628 2537

CUMMINS
Trigg & Wedd
3 Umlauf Street
P: (08) 8676 2105 Fax: (08) 8676 2303

CRYSTAL BROOK
Crouch Rural Pty. Ltd
26 Brandis Street
P: (08) 8636 2257 Fax: (08) 8636 2088

GAWLER
Steinborner Holden
Cnr Murray & Bridge Sts
P: (08) 8522 4222 Fax: (08) 8522 4898

KADINA
J.H. Rosewarne Pty Ltd
Graves Street
P: (08) 8821 1111 Fax: (08) 8821 1686

KEITH
Farmers Centre
McBain Street
P: (08) 8755 3222 Fax: (08) 8755 3211

KIMBA
R.J. Flavel Mechanical Repairs
30 High Street
P: (08) 8627 2555 Fax: (08) 8627 2044

KINGSTON
Lecornu's Service Garage
Agnes Street
P: (08) 8767 2424 Fax: (08) 8767 2533

LOXTON
Flight Motors Pty Ltd
Bookpurnong Terrace
P: (08) 8584 7277 Fax: (08) 8584 5937

MINLATON
Southway
9 Fifth Street
P: (08) 8853 2322 Fax: (08) 8853 2451

MAITLAND
Maitland Motors Pty Ltd
58 Robert Street
P: (08) 8832 2601 Fax: (08) 8832 2673

MENINGIE
Peter Hood Holden
Cnr Princes Highway & Coonalpyn Road
P: (08) 8575 1109 Fax: (08) 8575 1537

MILLICENT
O G R Millicent
98 George Street
P: (08) 8733 3488 Fax (08) 8733 3112

MT. BARKER
Gilbert Motors
57 Adelaide Road
P: (08) 8391 1500 Fax: (08) 8398 2124

MT. GAMBIER
O.G. Roberts & Co
Jubilee Highway West
P: (08) 8725 6788 Fax: (08) 8723 0636

MURRAY BRIDGE
Dutton Motors Pty Ltd
7 Adelaide Road
P: (08) 8532 1999 Fax: (08) 8531 0599

NARACOORTE
Kingcraig Motors Pty Ltd
158~164 Smith Street
P: (08) 8762 1555 Fax: (08) 8762 1806

PORT AUGUSTA
Hayes Augusta Motor Company
38 Stirling Road
P: (08) 8641 0488 Fax: (08) 8642 4300

PORT LINCOLN
City Motors
King Street
P: (08) 8682 1100 Fax: (08) 8682 4734

PORT PIRIE
Spencer Holden
50 Ellen Street
P: (08) 8632 3888 Fax: (08) 8632 6405

RENMARK
Rosenthal Motors Pty Ltd
Ral Ral Avenue
P: (08) 8586 6626 Fax: (08) 8586 4040

ROXBY DOWNS
Hayes Augusta Motors
10 Gosse Street
P: (08) 8671 0100 Fax: (08) 8671 0950

STRATHALBYN
Gilbert Holden Strathalbyn
High Street
P: (08) 8536 2066 Fax: (08) 8536 2672

TANUNDA
Hage & Co Pty Ltd
50 Murray Street
P: (08) 8563 2123 Fax: (08) 8563 3488

VICTOR HARBOR
Southern Motors Holden
5 Victoria Street
P: (08) 8552 1255 Fax: (08) 8552 2788

WAIKERIE
Riverside Holden
6 Crush Terrace
P: (08) 8541 2900 Fax: (08) 8541 3325

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McLeod's Whyalla Motor Company
64 Essington Lewis Avenue
P: (08) 8645 7388 Fax: (08) 8645 5512

YANKALILLA
Martin Motors Pty Ltd
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P: (08) 8558 2052 Fax: (08) 8558 2911

YORKETOWN
Southway Holden
7 Minalaton Road
P: (08) 8852 1322 Fax: (08) 8852 1271

W.A. Metropolitan

CANNINGTON
Brian Gardner Holden
1308~1324 Albany Hwy
P: (08) 9356 9000 Fax: (08) 9458 9144

FREMANTLE
Shacks Holden
64 Queen Victoria Street
P: (08) 9432 9432 Fax: (08) 9432 9456

GOSNELLS
Gibbons Holden
2325 Albany Highway
P: (08) 9398 2211 Fax: (08) 9398 5683

MELVILLE
Melville Holden
532~540 Canning Highway
P: (08) 9333 5333 Fax: (08) 9333 5300

MIDLAND
Goldy Holden
161 Great Eastern Highway
P: (08) 9274 8000 Fax: (08) 9274 6042

MORLEY
Metro Motors Holden
212 Walter Road West
P: (08) 9449 3522 Fax: (08) 9449 3596

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Shacks Cockburn
15 Rockingham Road
P: (08) 9410 1433 Fax: (08) 9410 2331

OSBORNE PARK
North City Holden
Cnr Scarborough Beach Rd & Harborne St
P: (08) 9273 2222 Fax: (08) 9273 2220

PERTH
City Motors
505 Newcastle Street
P: (08) 9422 7777 Fax: (08) 9422 7630

VICTORIA PARK
Youngs Holden
529 Albany Highway
P: (08) 9449 9449 Fax: (08) 9449 9494

WANNEROO
Phoenix Holden
5 Berriman Drive
P: (08) 9409 9200 Fax: (08) 9309 2140

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Mark Loveridge Holden
92~98 Earl Street
P: (08) 9842 8000 Fax: (08) 9841 8623

BRIDGETOWN
Kordics Bridgetown
Hampton Street
P: (08) 9761 1377 Fax: (08) 9761 2151

BROOKTON
Coote Motors
1 Robinson Road
P: (08) 9642 1108 Fax: (08) 9642 1003

BROOME
Norwest Holden
7 McPherson Street
P: (08) 9192 1277 Fax: (08) 9192 2230

BUNBURY
Bunbury Holden
3 Sandridge Road
P: (08) 9791 3899 Fax: (08) 9791 2990

BUSSELTON
Fennessy's
4~8 Bussel Hwy
P: (08) 9752 1577 Fax: (08) 9752 4080

CARNAMAH
T & H Walton Stores Pty Ltd
Robertson Street
P: (08) 9951 1130 Fax: (08) 9951 1082

CARNARVON
North West Autos
175 Robinson Street
P: (08) 9941 1159 Fax: (08) 9941 1363

COLLIE
Station Motors
102 Throssell Street
P: (08) 9734 1855 Fax: (08) 9734 1913

CORRIGIN
Aquip Machinery
Kunjin Road
P:(08) 9063 2463 Fax: (08) 9063 2537

DERBY
BP Colac
Loch Street
P: (08) 9191 1256 Fax: (08) 9191 2133

ESPERANCE
Dempster Holden
Norseman Road
P: (08) 9071 1155 Fax: (08) 9071 3799

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Young Motors
34 Cathedral Avenue
P: (08) 9921 1088 Fax: (08) 9964 1157

HARVEY
Stockman Holden
111 Uduc Road
P: (08) 9729 3333 Fax: (08) 9729 3221

KALGOORLIE
Golden City Holden
114 Boulder Road
P: (08) 9021 1699 Fax: (08) 9021 5737

KARRATHA
Moxham Motors
Lot 4551 Balmoral Road
P: (08) 9144 1225 Fax: (08) 9144 1258

KATANNING
Edwards Holden
159 Clive Street
P: (08) 9821 2388 Fax: (08) 9821 2429

KELLERBERRIN
Dowding Motors
1 Mitchell Street
P: (08) 9045 4141 Fax: (08) 9045 4466

KOJONUP
Harris' Garage
Albany Highway
P: (08) 9831 1122 Fax (08) 9831 1043

KUNUNURRA
Elgee Holden
231 Bloodwood Drive
P: (08) 9168 2236 Fax: (08) 9169 1124

MANDURAH
Mandurah Holden
53 Pinjarra Rd
P: (08) 9535 8777 Fax: (08) 9535 8822

LAKE GRACE
Lake Grace Machinery
Absolin Street
P: (08) 9865 1100 Fax: (08) 9865 1391

MANJIMUP
Manjimup Automotive Services
Pritchard Street
P: (08) 9771 1388 Fax: (08) 9777 1214

MERREDIN
Carson's of Merredin
112 Barrack Street
P: (08) 9041 1444 Fax: (08) 9041 1765

MOORA
Frank Lewis Holden
92 Gardiner Street
P: (08) 9651 1408 Fax: (08) 9651 1724

NAREMBEEN
Aquip Machinery
20 Churchill Avenue
P: (08) 9064 7214 Fax: (08) 9064 7065

NARROGIN
Marley White & Co
126 Federal Street
P: (08) 9881 4777 Fax: (08) 9881 4707

NORTHAM
Withnell Motors
58 Fitzgerald Street
P: (08) 9622 1188 Fax: (08) 9622 3664

PORT HEDLAND
15 Anderson Street
Moxham Motors
P:(08) 9173 3660 Fax: (08) 9144 1258

WAGIN
Marley White & Co
63 Tudor Street
P: (08) 9861 1055 Fax: (08) 9861 1657

WONGAN HILLS
Agro Machinery Pty Ltd
10 Wongan Road
P: (08) 9671 1311 Fax: (08) 9671 1505

WYALKATCHEM
Agro Machinery
Railway Terrace
P: (08) 9681 1088 Fax: (08) 9681 1082

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Auckland Metropolitan

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West City Holden
435 Great North Road
P: (09) 836 0097 Fax: (09) 837 5291

MANUKAU
Davie Motors Limited
58 Cavendish Drive
P: (09) 262 1012 Fax: (09) 262 1011

NEWMARKET
Schofield & Co. Limited
50 Great South Road
P: (09) 520 6369 Fax: (09) 524 1500

PANMURE
Moyes Motor Group Limited
510 Ellerslie/Panmure Highway
P: (09) 527 1200 Fax: (09) 527 8314

TAKAPUNA
Giltrap Holden
Wairau Road
P: (09) 444 8114 Fax: (09) 444 8008

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ALEXANDRA
Currie Motors
65 Centennial Avenue
P: (03) 448 6989 Fax: (03) 448 9384

AMBERLEY
Arthur Burke Limited
Markham Street
P: (03) 314 8121 Fax: (03) 314 8281

ASHBURTON
Smallbone Brothers Limited
Cnr. Burnett & Cass Streets
P: (03) 308 7159 Fax: (03) 308 5551

BLENHEIM
Wadsco Motors Limited
55-59 Scott Street
P: (03) 578 5199 Fax: (03) 578 2572

CHRISTCHURCH
Blackwell Motors Limited
Cnr. Cashell/Madras Streets
P: (03) 379 5500 Fax: (03) 366 4683

DUNEDIN
Cooke Howlison Limited
484 Andersons Bay Road
P: (03) 456 0570 Fax: (03) 455 5668

DARGAVILLE
Marcel Motors Limited
34 Victoria Street
P: (09) 439 7399 Fax: (09) 439 7399

GISBORNE
Enterprise Cars (1992) Limited
323 Gladstone Street
P: (06) 867 8368 Fax: (06) 867 1280

HAMILTON
Ebbett Waikato Limited
Anglesea Street
P: (07) 838 0949 Fax: (07) 838 3380

HASTINGS
Karamu Holden
Cnr. Karamu Road & Albert Street
P: (06) 876 6700 Fax: (06) 876 6664

HAWERA
Moller Johnson Motors (Hawera) Limited
39-49 Regent Street
P: (06) 278 7166 Fax: (06) 278 5054

INVERCARGILL
GWD-Russells Limited
22 Yarrow Street
P: (03) 218 2149 Fax: (03) 218 3309

KAIKOHE
Bay Motors Limited
Wihongi Street
P: (09) 401 1860 Fax: (09) 401 0883

KAITAIA
Jim Crene Motors Limited
Melba Street
P: (09) 408 1310 Fax: (09) 408 1311

LEVIN
Horowhenua Motor Co. Limited
1-11 Exeter Street
P: (06) 368 7169 Fax: (06) 368 8536

LOWER HUTT
Brendan Foot Motors Limited
16-18 Railway Avenue
P: (04) 587 0005 Fax: (04) 566 2311

MASTERTON
Wagg & Harcombe Limited
87-93 Dixon Street
P: (06) 377 5169 Fax: (06) 378 8840

MATAMATA
Matamata Motor Group Limited
2 Arawa Street
P: (07) 888 7059 Fax: (07) 888 5709

MORRINSVILLE
Nicholson United Autos
Thames Street
P: (07) 889 7042 Fax: (07) 889 3529

NAPIER
Karamu Holden
Cnr Wellesley Rd & Thakeray St
P: (06) 874 3033 Fax: (06) 834 1454

NEW ZEALAND HOLDEN DEALERS cont.

NELSON
Nelson Bays Holden
2 Selwyn Place
P: (03) 545 7222 Fax: (03) 545 6057

NEW PLYMOUTH
Auto City
86 Molesworth Street
P: (06) 758 0919 Fax: (06) 758 5330

OAMARU
North Otago Motor Group Limited
24-30 Severn Street
P: (03) 434 5099 Fax: (03) 434 9983

OTOROHANGA
Pat Prescott Limited
205 Maniapoto Street
P: (07) 873 7119 Fax: (07) 873 7156

PAEROA
Linn Motors Limited
10-12 Belmont Road
P: (07) 862 8715 Fax: (07) 862 8711

PAHIATUA
Jones Motors Limited
34 Main Street
P: (06) 376 7524 Fax: (06) 376 7192

PALMERSTON NORTH
Robertson Motors
200 Rangitikei Street
P: (06) 358 1062 Fax: (06) 359 0303

PARAPARAUMU
Guy Weaver's Auto Village
Main Road
P: (04) 298 8089 Fax: (04) 298 7186

PUKEKOHE
Counties Motorcourt Limited
Cnr. Edinburgh & Tobin Streets
P: (09) 238 3259 Fax: (09) 238 3298

ROTORUA
Shorland Slater Limited
Old Taupo Road
P: (07) 348 3179 Fax: (07) 347 1503

STRATFORD
Ansford Johnson Limited
369 Broadway
P: (06) 765 6119 Fax: (06) 765 7410

TAUPO
Taupo Holden
Ruapehu Street
P: (07) 378 4130 Fax: (07) 378 0357

TAUMARANUI
Turaki Motors Limited
Hakiaha Street
P: (07) 895 7009 Fax: (07) 895 8909

TAURANGA
Ebbett Tauranga
Cnr. Wharf Street & Cameron Road
P: (07) 578 2843 Fax: (07) 578 6044

TE AROHA
Summit Motor Co. Limited
Kenrick Street
P: (07) 884 8174 Fax: (07) 884 8133

TE AWAMUTU
Rosetown Motors Limited
Cnr. Churchill & Mahoe Streets
P: (07) 871 5143 Fax: (07) 871 5045

TE PUKE
Bob Batchelor Motors Limited
Jellicoe Street
P: (07) 573 9781 Fax: (07) 573 6057

THAMES
Linn Motors
429 Pollen Street
P: (07) 868 9591 Fax: (07) 868 9595

TIMARU
Hervey Motors Limited
6 Sefton Street
P: (03) 684 7179 Fax: (03) 684 7176

UPPER HUTT
Twin Lakes Motor Company
Fergusson Drive
P: (04) 528 5609 Fax: (04) 527 8390

WANGANUI
Bob Burgess Motors Limited
1 Purnell Street
P: (06) 345 5588 Fax: (06) 345 5584

WELLINGTON
Williams & Adams
72-82 Taranaki Street
P: (04) 801 6777 Fax: (04) 385 7437

WHAKATANE
Harts Limited
Commerce Street
P: (07) 308 6334 Fax: (07) 307 1536

WHANGAREI
Mark Cromie Holden
5-13 Hannah Street
P: (09) 438 3199 Fax: (09) 438 2646

CHAPTER 10

Tow and load

Page

10-2 Towing
10-3 Towing equipment
10-4 Loading the car
10-5 Attaching a trailer
10-6 Towing and loading equipment
10-6 Superlift shock absorbers
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10-8 Running-in when towing
10-8 Car maintenance when towing
10-9 Wagon cargo barrier
10-11 Cargo net

TOWING

Your car is designed primarily as a passenger car, so handling, durability and economy may be affected by towing a caravan or trailer.

Refer to the chart on the facing page to see which equipment is specified as essential and which equipment is recommended for the weight you are towing. Your Holden Dealer will help supply and install towing equipment to suit your requirements. Note that regulations covering the maximum towing capacity varies from State to State.

Never exceed the loads given for the towing equipment fitted to your car. For your safety and your car's durability, all essential equipment must be fitted. Otherwise you may void your New Vehicle Warranty, to the extent that Holden considers the overloading or missing equipment to have affected the specifications or quality of your car.

Driving speed

When towing up to 1,600 kg maximum driving speed is as per the State's Law.

When towing between 1,600 kg and 2,100 kg maximum driving speed must not exceed 80 km/h.

CAUTION: Holden towing equipment is recommended where it is available. Where it is not available, no recommendation is made as to the make of equipment which should be used. Holden will not accept liability for defects occurring in towing equipment not marketed by Holden or for defects in the car arising from the use of such equipment. The use of such equipment may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended equipment affects the specifications or quality of your Holden vehicle. It is inadvisable to mix and match different brands of towing equipment, as equipment is usually designed as an integrated package.

TOWING EQUIPMENT

Up to 1200 kg	Essential	Holden 1,200 kg rated tow bar
	Essential	Holden trailer wiring harness
	Recommended	A load distribution hitch is recommended if towing a single axle trailer /caravan that weighs more than 750kg when loaded.
	Recommended	Trailer brakes, if required by your State's Law
Between 1200 kg and 1600 kg	Essential	Holden 1,600 kg rated tow bar
	Essential	Holden trailer wiring harness
	Recommended	A load distribution hitch is recommended when towing a single axle trailer/caravan.
	Essential	Electric or hydraulic brakes on the trailer/caravan
	Essential	Automatic transmission essential if car has a V6 engine.
	Essential	Heat shields for the rear muffler and the centre bearing
Between 1600 kg and 2100 kg	Essential	Holden 2,100 kg rating tow bar
	Essential	Holden trailer wiring harness
	Recommended	Adjustable load distribution hitch
	Essential	Electric or hydraulic brakes on the trailer/caravan
	Essential	Automatic transmission
	Essential	Heat shields for the rear muffler and the centre bearing
	Essential	Superlift shock absorbers

LOADING THE CAR

Overloading is a safety hazard and could also shorten the life of your car. The recommended carrying capacity of your car is, typically, as shown.

SEDAN - 5 occupants plus 68 kg luggage (408 kg load in total).

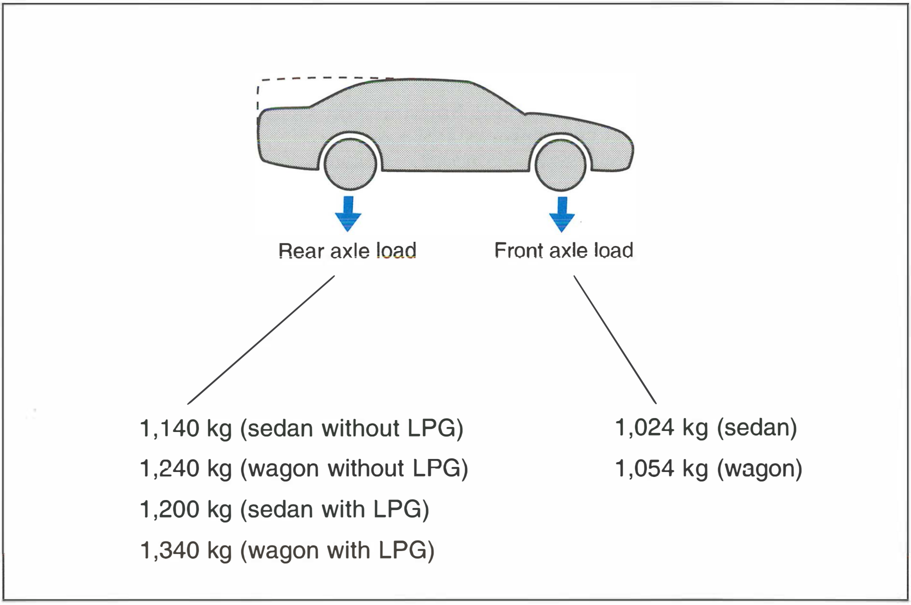
WAGON - 5 occupants plus 140 kg luggage (480 kg load in total)

However, do not exceed the maximum axle loads shown below in the diagram, considering the weight of any fitted Holden approved accessories.

If unsure, the car should be weighed at a weighbridge. Remember that weight on a roof rack must be included in calculating the payload.

Note that due to lack of room, the 3rd row child seat (sold as a Holden accessory) must not be fitted if the wagon is fitted with LPG.

Maximum front and rear axle loads



1,140 kg (sedan without LPG)
1,240 kg (wagon without LPG)
1,200 kg (sedan with LPG)
1,340 kg (wagon with LPG)

1,024 kg (sedan)
1,054 kg (wagon)

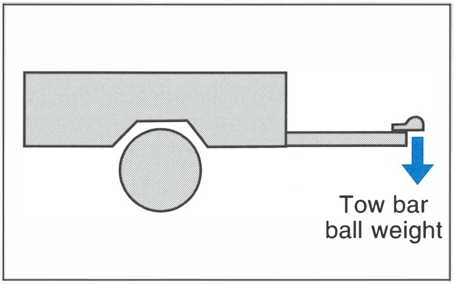
ATTACHING A TRAILER

Recommended procedure for attaching a trailer

If a caravan or trailer is hitched to the car it places a weight on the tow bar, this weight is called the "tow bar ball weight".

It is recommended that the tow bar ball weight should be 10% of the packed trailer/caravan weight. This can be adjusted by correctly packing the contents of the trailer/caravan, i.e., by moving items forwards or backwards within the trailer/caravan so as to change the balance of the trailer/caravan.

If the tow bar ball weight is too light or too heavy, the steering and handling of the car will be affected.



All towing

1. Axle loads must not be exceeded when the tow bar ball weight is included (refer previous page for maximum axle loads). If maximum axle loads are exceeded, sufficient weight should be removed from the rear of the car and transferred onto the trailer.
2. Ensure the weight of the packed trailer is not greater than the towing capacity of your Holden approved tow bar package.
3. Connect the trailer to the car.

When towing over 1,200 kg

4. Adjust superlift shock absorbers, if fitted (refer page 10-3 for requirement of superlift shock absorbers). Note that if towing at maximum trailer capacity, apply the maximum of 300 kPa pressure.
5. Adjust load distribution hitch so that the car and trailer are level with the ground.

Example:

- Wagon loaded with 5 occupants (with an average weight of 68 kg each) and 140 kg of luggage in the rear load area. This is the maximum load allowable.
- Trailer then hitched up, weighing 1,000 kg when loaded. The trailer has been correctly balanced so as to provide 10% of its weight on the tow bar. This translates to:

  140 kg (existing luggage)
  + 100 kg (10% of trailer weight)
  = 240 kg loaded on the wagon

  The wagon is now overloaded at the rear.
- Therefore, move 120 kg of luggage into the trailer. This now translates to:

  20 kg (luggage)
  + 112 kg (10% of the trailer, which now weighs 1,120 kg)
  = 132 kg loaded on the wagon

The wagon and trailer are now correctly loaded, as this weight is under 140 kg.

TOWING and LOADING EQUIPMENT

Distribution hitch

A distribution hitch is recommended when towing more than 750 kg.

A distribution hitch is designed to raise the rear of the car and transfer a portion of the load to the front wheels when the loaded trailer/caravan is hitched.

The loaded vehicle and trailer should be level to the ground.

If electric level ride suspension is fitted: When hitching a trailer/caravan it is important that the ignition be switched OFF before hitching the trailer/caravan and loading the car. The ignition must remain OFF until after any equalizing equipment is correctly adjusted, so that the level ride suspension moves the height *afterwards*.

Booster springs and superlift shock absorbers

The use of booster springs or superlift shock absorbers DOES NOT increase the carrying capacity of the car. Maximum loads for your car must NOT be exceeded, otherwise overloading of axle parts may shorten the life of your car.
Superlift shock absorbers do, however, allow adjustment of the car's height, so that you have improved handling and better ground clearance in rough terrain when the car is heavily loaded.

CAUTION:

Do not drive with superlift shock absorbers inflated when the car is not loaded, as car handling is affected. The car should be at normal level.

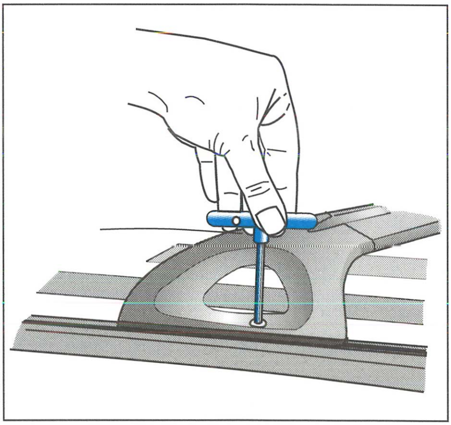
Always ensure that superlift air pressures are within the minimum and maximum pressures shown on the tag attached to the air pressure valve. When towing 2,100 kg the superlift shock absorbers should be adjusted to 300 kPa.

Roof rack loads

Roof rack loads alter the handling of a car, due to a change in the centre of gravity. When carrying loads on the roof rack, avoid abrupt swerving or sharp steering. The load, which should not exceed 50 kg for sedans or 80 kg for wagons, should be evenly distributed.

The crossbars on the wagon roof rack can be adjusted using a special key, provided in the glovebox of your new car.

To adjust, loosen the screws at both ends of the crossbar with the key. Move the crossbar backwards or forwards as required, then tighten the screws with the key.



Remember that weight on a roof rack must be included when calculating the payload.

TOWING PRECAUTIONS

- When towing, your tyres should be inflated to the maximum recommended pressure (refer Chapter 7 for the tyre placard location).
- Ensure that a load distribution hitch is correctly distributing the ball load and that superlift shock absorbers are adjusted correctly, refer page 10-5.
- Tighten the tow ball retaining nut to 175 Nm and check the torque frequently.
- Your car will handle differently when towing. It's a good idea to make a couple of short distance trips with the caravan or trailer before you set off on the big one.
- Have your car correctly maintained and serviced.
- Have your caravan or trailer maintained and serviced, with particular attention given to condition of brakes, tyres, suspension, wheel bearings, towing coupling and lighting.
- You should have an extended-arm mirror on both sides of your car.
- Headlights may need re-aiming after the loaded caravan has been hitched, particularly if a load distribution hitch is not used.
- Use a lower gear, rather than your brakes, when descending steep hills.
- If your caravan or trailer moves off the road behind you, allow the left wheels of your car to move off as well. When it is safe to do so, carefully steer back on to the road. A sudden attempt to steer back could make you swerve dangerously.
- *Automatic transmission:* To stop the transmission constantly changing between 3rd and 4th gear, it is recommended that the "Power" mode be selected when towing. Refer page 4-4 for selection of "Power" or "Economy" modes.
- Do not use axle-mounted hitches. They can cause damage to the axle housing, wheel bearings, wheels and tyres.
- Ensure that the tow bar does not obscure the rear licence plate. If necessary, remove the towbar tongue when it is not required for towing.
- If a towbar is removed, be certain to have any mounting holes in the underbody properly sealed to prevent the possible entry of exhaust fumes, dust and water.
- TRAILER BRAKES:

  Trailer brakes are recommended on trailers weighing 500 kg when loaded. Some States require trailer brakes on loads less than 500 kg and you should check your State's requirements.

  The brakes on the trailer or caravan must be designed to cope with the braking requirements of that trailer or caravan under all towing conditions, without adversely affecting the brakes on the car.

  Different types of brake signalling devices are available for trailers, such as electric, overrun or hydraulic signalling. If a hydraulic signalling type is used, it must not displace more than 0.21 cc of fluid during braking. It must not be fitted to the front brake system, only to the rear brake system. While no recommendation is made by Holden with regard to the manufacturer of the brake system, the specifications issued by PBR indicate that their unit meets Holden requirements.

TOWING cont.

Running-in when towing

It is recommended that you drive your new car for at least 1,500 km before towing. If you must tow before this do not exceed 80 km/h. The same applies if you have a new or reconditioned engine, transmission or rear axle.

Car maintenance

More frequent car maintenance is required when using your car to pull a trailer or caravan, refer page 12-4. For example, if an automatic transmission is fitted, the transmission fluid should be changed every 12 months or 20,000 km.

Kerb weight

Some States specify that the load being towed must not exceed the weight of the car. The kerb weights provided below, are for a standard unloaded car, without options but with a full tank of fuel.

	3800 (V6) engine	**Gen III (V8) engine**
Executive sedan	1,521 kg	1,597 kg
Executive wagon	1,577 kg	1,651 kg
Berlina sedan	1,580 kg	1,638 kg
Berlina wagon	1,642 kg	1,700 kg
Calais	1,665 kg	1,682 kg

WAGON CARGO BARRIER (if fitted)

Your new cargo barrier has been designed to fit at two positions. It can be fitted behind the front seats when the rear seat is folded down, or behind the rear seats when they are upright.

Behind upright rear seat

For this position, the extension straps and folding centre leg are not required. Ensure all are folded back and tied away securely.

With the cargo barrier's compliance plate facing to the rear, tilt the cargo barrier back and lift into the wagon load area.

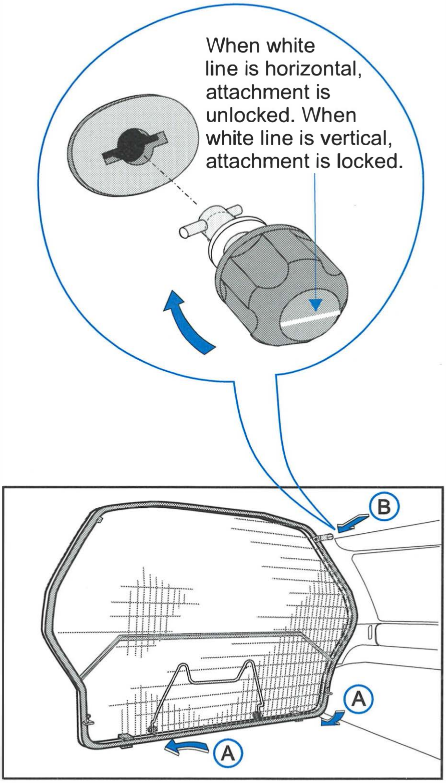
Insert the two cargo barrier base hooks into the slots in the wagon floor, directly behind the rear seats "A".

Tilt the top of the cargo barrier up towards the roof and align the top attachments with roof rear attaching holes "B".

Push the attaching pins of the cargo barrier firmly into the roof and turn 90 degrees to lock.

Ensure that all attachments, top and bottom, are firmly secured.

When moving or removing the cargo barrier reverse this fitting procedure.



When white line is horizontal, attachment is unlocked. When white line is vertical, attachment is locked.

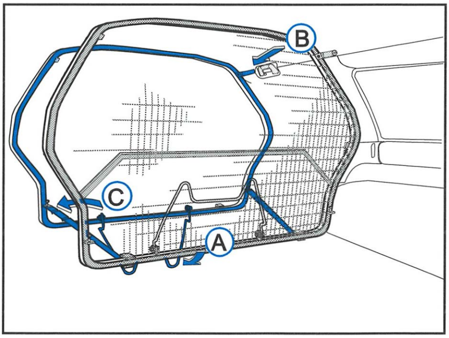
Behind front seats
- with rear seat folded

Remove rear head restraints (if fitted) and fold down the rear seat, refer Chapter 3.

Remove the restraining tie from the centre leg of the cargo barrier and rotate the leg to the "down" position "A".

With the cargo barrier's compliance plate facing to the rear, tilt the cargo barrier back and lift into the wagon load area.

Lift the cargo barrier behind the front seats, with the centre leg resting on top of the



WAGON CARGO BARRIER (if fitted) cont.

transmission tunnel.

Tilt the top of the cargo barrier up towards the roof and align the top attachments with roof front mounting locations "B".

Push the attaching pins of the cargo barrier firmly into the roof and turn 90 degrees to lock into position, refer illustration on previous page.

Remove restraining ties on the extension straps. Swing the extension straps forward and align with the cargo barrier extension pins "C".

Pull up extension pins on cargo barrier, secure the ends of the extension straps under the pins, release the pins. Ensure pins completely lock back down into place.

Ensure that all attachments are secured firmly.

When moving or removing the cargo barrier reverse this fitting procedure.

Carrying heavy loads in the rear cargo area

When carrying heavy loads Holden recommends fitting a genuine Holden cargo barrier, designed to reduce cargo impact to passengers in an accident.

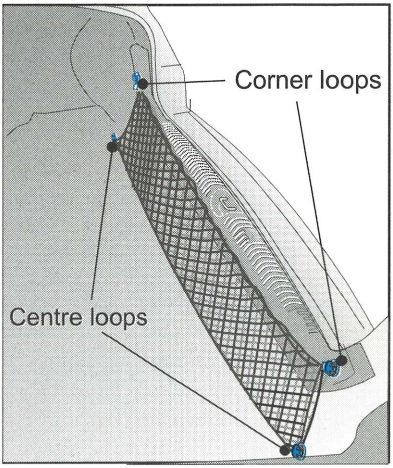
WARNINGS:

1. **Place loads against the cargo barrier.**
2. **If involved in an accident or accidentally damaged, the cargo barrier should be replaced and the anchorages inspected by an authorised Holden Dealer.**
3. **Adult passengers should not ride in the cargo area and children should only ride in the cargo area when restrained in a Holden accessory seat. The cargo barrier must be removed when children are riding in a Holden accessory seat.**
4. **Remember that the tailgate cannot be opened from inside the cargo barrier area. Never leave children in the cargo area unattended if a cargo barrier is fitted.**
5. **Take care when placing loads behind the cargo barrier so as to prevent damage to child restraint anchorages and seat belt webbing in an accident.**
6. **In an accident, cargo may cause the cargo barrier to deform towards passengers.**
7. **The plaque must not be removed from the cargo barrier.**
8. **Clean the cargo barrier only with soap and water. Do not use solvents or chemicals. Discard the cargo barrier if it becomes rusted.**
9. **Do not obstruct seat belts or child restraints, or their operation.**
10. **Seat, seat belts or child restraint anchorages must not be used to secure the cargo barrier.**
11. **Long thin items of cargo should be placed long ways across the car to minimize the risk of penetration.**
12. **Do not attach (drill, rivet, stick etc.) objects to the front or rear of the cargo barrier.**
13. **The maximum load for a genuine Holden cargo barrier is 60 kg single mass. That is, if an object weighs 60 kg, only one object is permitted behind the cargo barrier.**

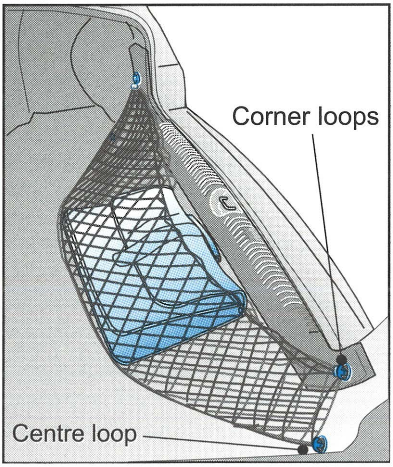
CARGO NET (if fitted)

The cargo net is provided inside the boot to secure goods.

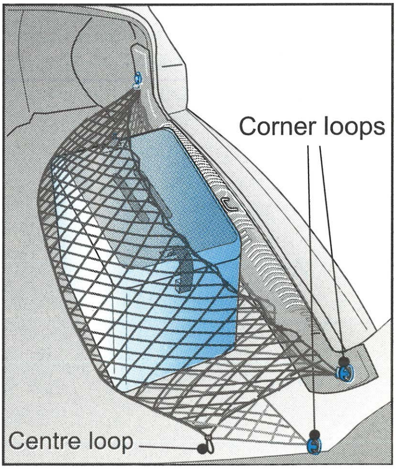
4 hooks are provided in the car (2 on the left side, 2 on the right) and 6 loops are provided on the cargo net. This allows different ways of attaching the net to accommodate different sized objects.



When the net is not required for big objects, attach the 4 corner loops of the net to the top 2 hooks on the car (2 on one side, 2 on the other) and attach the net's 2 centre loops to the bottom hooks on the car.



When the net is required for holding objects such as a briefcase or groceries, the net can be opened and the objects placed inside.



If larger objects, such as a car fridge, are to be secured, the net can be re-hooked as shown, i.e. with a corner loop on each hook and the centre loops unhooked.

The maximum load capacity of the net is 15 kilograms.

CHAPTER 11

Cleaning

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INTERIOR CLEANING

CAUTION:

Many cleaners may be toxic, flammable or may damage the interior. When cleaning the interior, avoid volatile cleaners such as: acetone, lacquer thinners, enamel reducers, nail polish removers, or cleaners such as laundry soaps, bleaches or reducing agents. Never use carbon tetrachloride, petrol or naphtha for any cleaning purpose. Be sure the car is well ventilated while using any cleaners and always follow the cleaning manufacturer's recommendations. Water based cleaners, rather than solvent based cleaners, are recommended.

Steam cleaning of seats is not recommended.

Care and cleaning of upholstery

Dust and dirt which accumulate on upholstery should be removed every few weeks - more often with constant driving. This can be done readily with a vacuum cleaner. Before attempting to remove spots and stains, it is necessary to determine as accurately as possible:

- The type of fabric.
- The nature and age of the stain.
- The effect of the stain removal agent on the upholstery.

Remove the stains as soon as possible after they have been made. If they are allowed to remain for any length of time they very often become oxidised or set, and removal becomes difficult, if not impossible.

Calais door trim

Marks on the velour fabric, which extends to the bottom of the door, can be cleaned off using mild, soapy water on a clean cloth, rubbed in the direction of the pile. When dry, a soft brush may be used to smooth the pile.

Vinyl

Vinyl fabrics are used for seating, headlinings and auxiliary trimming. The surface should be wiped over with a dry cloth during the regular cleaning of the car.

Should dirt accumulate and become embedded in the material pattern:

1. Use luke warm water and soap, or Holden Velour Fabric and Vinyl Cleaner, to work up thick suds on a piece of cheesecloth and apply to the surface. A soft bristle brush can be used to remove embedded dirt and stubborn stains.
2. Repeat using only a damp cloth and no soap.
3. Wipe dry with a soft cloth. The above cleaning instructions also apply to the rubber floor mats.

INTERIOR CLEANING cont.

Cloth

- Most loose dirt and dust can be removed by a vacuum cleaner or soft brush.
- DO NOT use a whisk broom or a coarse hair brush.
- For normal soiling, sponge lightly with warm water containing a mild detergent. The fabric should then be rubbed lightly, and if necessary, sponged again to remove anything stubborn. Soak up excess fluid with a dry cloth. Holden Velour Fabric and Vinyl Cleaner may be used, but should be used sparingly.

Carpet

Thoroughly brush or vacuum the carpet. In many instances the carpet may require no further cleaning. If the carpet is extremely soiled, thoroughly vacuum it to remove loose dirt then, using Holden Velour Fabric and Vinyl Cleaner, clean a small area at a time. After each area is cleaned, remove as much of the cleaner as possible with a vacuum cleaner.

Secured carpet mats (if fitted)

Retainers are provided to hold carpet mats in place. Use a screwdriver or similar (not the car key) to undo retainers when required. To replace, push the retainer in the back of the mat into the hole in the carpet and turn clockwise to secure.

Leather

To remove surface dust and grit, regularly wipe leather with “Softly” or similar or mild detergent in warm water using a soft cloth or sponge. Clean leather every 3 months with a mild saddle soap and a damp soft cloth to remove in-ground dirt which is not visible. Allow leather to dry naturally and apply a colourless beeswax dressing.

Seat belts

Clean seat belts only with a mild, non-abrasive soap and luke warm water. After washing, be sure to thoroughly sponge the washing solution out of the belts.

CAUTION: Do not bleach or dye seat belts as this may severely weaken them.

Interior glass

The interior glass area of the car should be cleaned using Holden Glass Cleaner with a clean soft cloth. Care must be taken when cleaning inside the rear window so as not to damage the demister.

Never use abrasive cleaners on any car glass, as they can cause scratches.

CARING FOR PAINT

To help preserve that shiny new car finish, special attention should be given to correctly treating those conditions that can damage the paint.

Road bloom: If, over a long period of time, oils, dirt, exhaust and other pollutants are allowed to build up, they may combine to affect the paint finish.

Etching: Tree sap, bird droppings, salt water and other natural deposits can, if allowed to stay on the paint, leave an etching or scarring.

Pitting: Tar spots and some industrial fallout can react chemically and may cause pitting to the surface of the paint.

Paint inspection

Regular inspection of the car should be made for scratch marks, cracks or damaged areas, all of which could develop rust. Any deep scratches, cracks or break-down in the finish should be repaired without delay. Care should be taken to ensure that any rusting is counteracted immediately, otherwise rust “creep” will extend beyond the damaged area, particularly in tropical or coastal areas, where the moist, or salt-laden air accelerates rusting. The paint finish of the car gives a very high degree of protection against the weather, but it should be realised that wear and deterioration occur when the car is exposed to elements for prolonged periods. The car therefore should be garaged whenever possible.

To prevent damage of the paint surface, foreign matter should always be removed as soon as possible. Due to the acidity, it is recommended that foreign matter such as bird droppings be removed within 24 hours.

The way the paint keeps its condition over time can be assisted by you. The easiest way to keep that paint looking bright and shiny is to keep it clean. A wash once a week will do wonders. However, it must be done correctly.

Washing your car

1. Never use an automatic wash that has anything that touches the paint other than water.
2. Wash your car once a week to remove any build up of road grime that may have been deposited on your paint.
3. Find a cool, shady spot to wash it. Don't ever wash it in direct sunlight.
4. Hose the car down from top to bottom with lots of cold water. This removes any grit or other loose particles and substances. Don't use a sponge or cloth yet.
5. Fill a bucket with luke warm water and add no more than 2 capfuls of gentle detergent. Do not use hot water, strong soap or chemical detergents.
6. To remove bird droppings, soak with a wet sponge for several minutes before washing off. If still persistent, use a solution of 1 litre of water and 110 grams of dissolved baking soda (Bicarbonate of Soda). Flush the washed parts with clean water.
7. Starting with the roof, use a clean sponge to clean a small section at a time. Do not allow liquid to dry before rinsing off that section with clean water. When you have completed each section, rinse the whole car again with cold water.
8. Dry the clean car thoroughly with a good quality Chamois.

CARING FOR PAINT cont.

CAUTION: Care should be taken when moving the car after washing, in case water has affected the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with a clear area ahead, until brake performance returns to normal.

Removing stains, such as grease, oil and tar spots

Just washing you car regularly means that most of the harmful substances deposited on the paint will be removed before they can cause permanent damage. However, some substances are not easy to remove. So if you notice stains on the paint, make sure that you remove them at the earliest possible opportunity.

Grease and oil, and even tar if it's fresh, can be removed from the paint with a little kerosene or turpentine. As a precaution against staining, wash and polish the area as soon as possible after the stain has been removed.

A rubbing or cutting compound can be used after a normal wash. But this should never be done on a regular basis because it removes paint.

Warnings:

- Some chemical cleaners used for removing road oils and tars from painted surfaces have been found to be detrimental to automotive paint.
- If petrol is spilt on the paint when refilling, flush off immediately with clean water, as petrol has a tendency to stain or soften new paint finish during the weathering out period, particularly when the car is exposed to high temperatures.
- Petrol MUST NOT be used to clean any painted or plastic surfaces.

Ventilation system intake

The intake area between the bonnet and windscreen may collect leaves, which will impair air flow into the car.

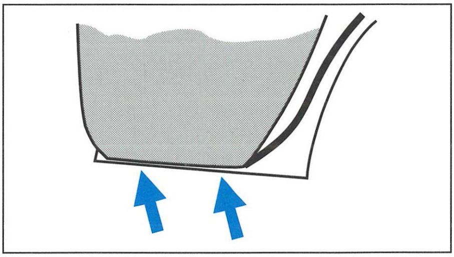
It is recommended that this area be cleared of debris whenever you wash your car.

Under car washing

The effects of salt etc. from road surfaces can cause rust under the car. The underbody should be hosed with plain water whenever the car is being washed. In geographical areas having a heavy concentration of corrosive materials (such as by the sea) it is recommended that the complete underbody be inspected and washed at least once each year, preferably after a winter's exposure. Particular attention should be given to cleaning out the underbody where dirt and other foreign materials may have collected.

Door drain holes

It is important that the drain holes at the bottom of the door panels are checked to make sure that they are free of dirt and other foreign materials which could trap water inside the panels. Clogged drain holes can be cleaned with a small screwdriver and these drain holes are angled towards the rear of the car.



EXTERIOR CLEANING, WHEELS & TYRES

Polishing

Under normal circumstances the paint doesn't need polishing to retain its shine. A weekly wash is sufficient. However, the use of a Polymer Glaze about every 3 months will reduce the effects of road bloom by removing natural contaminants which can build up on the paint.

DO NOT ATTEMPT TO APPLY A POLISH WITHOUT FIRST WASHING TO REMOVE LOOSE GRIT, SURFACE DIRT, DUST OR GREASE ETC.

Tyres

Sponging with cold water is all that is necessary for normal cleaning. Oil and grease should be removed with soap and water or detergent. For tar or other substances, a mild abrasive, such as mechanic's hand soap or kitchen cleaning powder, may be used if necessary. Thoroughly wash the tyres with water to finish. Petrol must not be used for cleaning tyres.

New tyre look can be restored using Holden Tyre and Bumper Shine.

Alloy wheels

To preserve the original appearance of alloy wheels, keep them clean and free from build up of road dirt. Holden Wheel Cleaner can be used for cleaning alloy wheels. Do not use abrasive cleaners on alloy wheels.

EXTERIOR GLASS CLEANING

Glass cleaning - general

Special care should be taken to avoid scratching the glass. If it is cleaned at the same time as the rest of the car, there is a possibility that particles of grit will cause fine scratches. Flush off any mud on the glass when washing the body, but leave the final cleaning and polishing until afterwards. Use Holden Glass Cleaner and wash each section of glass in turn, making sure that the water, its container and the sponge are quite clean and free from grit. Clean old linen cloth is better than new material for polishing glass.

Windscreen

It is important that the windscreen be kept clean so that the wiper blades may be as effective as possible. Old wiper blades can cause windscreen scratching and so should be regularly inspected and replaced.

Abrasive cleaners should never be used to clean glass as they can cause scratches, impairing night vision. After the windscreen has been cleaned with a wet sponge it should be wiped over with a soft, lint free cloth or chamois.

It is recommended that Holden Optikleen be added to the windscreen washer reservoir.

Wiper blades

Oil and road scum thrown up on the windscreen will cause smearing when the wipers are switched on, when the dirt is transferred onto the wiper blades. Many owners, whilst they methodically clean the windscreen glass, omit to clean the wiper blades and consequently smearing of the glass reappears immediately the wiper blades are used. The blades can be cleaned by lifting them off the windscreen and cleaning with Holden Optikleen and a clean cloth.

DO NOT OPERATE THE WIPER BLADES BY HAND AS THIS MAY DAMAGE THE WIPER DRIVE MECHANISM

If the wiper blades are used to clean dust and dirt from the windscreen in dry conditions always use the washer system first to wet the windscreen. Ensure that the windscreen washer reservoir is not empty.

Should the wiper blades be frozen to the windscreen, they must be lifted off and freed by hand before switching on the wipers.

CLEANING PRODUCTS

HOLDEN PART NUMBER	SIZE	DESCRIPTION	USAGE
92141386	500 ml	Polymer glaze polish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
M38424	400 g	Velour fabric and vinyl cleaner	Cleans and deodorises velour, most vinyl upholstery, hood linings, mats and carpets.
M40383	350 g	Tyre and bumper shine	Restores tyres and bumpers to as-new finish.
92141182	350 g	Glass cleaner	Cleans all glass surfaces.
92141392		Chamois	
92140005	500 ml	Optikleen	Windscreen washer solvent.
92140004	5 ml	Optikleen sachet	Windscreen washer solvent; 1 sachet per washer bottle refill.
M40500	300 g	Bug, tar and spot remover	Quickly dissolves and removes tar, grease, oil, bug and other stubborn stains from your car's exterior.
92141395	750 ml	Wheel cleaner	Wheel cleaner, including alloy wheels
M37223	400 g	Degreaser	Removes oil and grease from engines.

CHAPTER 12

Servicing

Page

12-2 Service intervals
12-4 Abnormal operating conditions
12-5 Abnormal operating coupons
12-7 Maintenance schedule
12-10 Service costs
12-12 Service coupons

SERVICE INTERVALS

Service intervals

The first service is due at 1,500 km, then at 10,000 km, 20,000 km, 30,000 km etc.

Distance based service intervals

The Maintenance Plan for your car has been developed for the convenience of the average driver, who drives approximately 10,000 km in 6 months.

If you drive less than 10,000 km in 6 months some oils have to be changed more frequently. The oils in the car deteriorate with age. Refer to page 12-4 for more information about abnormal operating conditions.

Service reminder message

A service reminder message is built into the trip computer.

The reminder message first appears 1,000 km before the service is actually due, giving you time to arrange for the service to be carried out. The message shows on the Trip computer for 10 seconds whenever the car's ignition is switched ON or OFF, until the trip computer is reset. When the service is overdue the message flashes for 10 seconds when the ignition is turned ON or OFF.

- **SERV 1500 km** shows when the car has travelled 500 km since it was built.
- **SERV 10,000 km** shows when the car has travelled 9,000 km since it was built.
- **SERV 20000 km** shows when the car has travelled 19,000 km since it was built.
- **SERV 30000 km** shows when the car has travelled 29,000 km since is was built etc.

The trip computer will be reset for you by your Holden Dealer when you take the car in to be serviced. If, for some reason, you wish to reset the reminder message yourself, follow the sequence below:

1. Turn the ignition OFF.
2. Hold down the trip computer ▲ and ▼ buttons together.
3. Turn the ignition ON while still holding down both buttons.
4. After approx. 3 seconds, release both buttons.
5. Press and release the MODE button; the service due screen appears on the display.
6. Press and hold both ▲ and ▼ buttons for approx. 3 seconds until a beep is heard.
7. Release both buttons.
8. Turn ignition OFF.

This message is calculated only by distance. Remember that if you are driving infrequently special servicing may be required, refer page 12-4.

The free first service

The 1,500 km service is performed "free of charge" by the Selling Dealer. This service may be carried out by another Holden Dealer provided you have a letter of Introduction from the Selling Dealer. Your Dealer will supply the necessary "Letter of Introduction" on request.

SERVICING

Service Coupons

Service coupons are provided at the end of this chapter. When each service is performed the coupon is removed so that the following service coupon is readily visible to remind you when the next service is due.

After the service is completed, the owner should check that the service has been validated, by the Dealer stamping and signing the coupon stub. This is important as it not only assists in the determination of Warranty Claims, but enhances the value of the vehicle when selling.

Service coupons are provided up to 200,000 km. After that time the "Maintenance Plan" on pages 12-7 to 12-10 should be followed, starting from the 20,000 km service.

Your Holden Dealer

When it comes to service, remember that your Holden Dealer has the trained personnel and specialised equipment to correctly service your car. Your Dealer invites you to return for all your service needs both during and after the Warranty Period.

The safety, economy, emission control, performance and reliability of your car cannot be assured unless regular maintenance is performed, preferably by factory-trained technicians at Holden Dealers.

Warranty and service

All maintenance services listed in this Handbook and replacement of service items are the responsibility of the owner and as such are NOT considered, under the provisions of the New Vehicle Warranty, to be rectification of defective material and workmanship. Items such as wheel alignment, necessary adjustments to drive belts, transmission, clutch, parking brake, etc. or any other items which may require servicing due to fair wear and tear are carried out at the owner's cost.

Damage caused by failure to have proper maintenance services carried out by an authorised Holden Dealer or authorised Service Outlet, or in accordance with Holden's specifications, may void your New Vehicle Warranty. It is strongly recommended that you read the "New Vehicle Warranty" in Chapter 9 so that you are aware of your Warranty exclusions.

ABNORMAL OPERATING CONDITIONS

If your car is driven under any of the abnormal conditions listed below it is recommended that some items be serviced more frequently than shown in the Maintenance Plan.

The extra services are only required while your car is driven under the abnormal operating condition. If you operate under any of these conditions on a one off basis, e.g., holiday trip, then an extra service should be for that time only. As a guide, if you operate continually for a period of one month or 1,000 km under the abnormal condition, then this could require additional services.

If you consider that further servicing is required, due to the type of driving or before a long trip, please discuss the situation with the service manager of your Holden Dealer.

The abnormal conditions

A = When driving less than 10,000 km in 6 months.
B = Dust, dirt, loose road material.
C = Muddy and wet areas.
D = Cold weather (below 5°C) and when most trips are less than 5 km.
E = Stop-start driving, excessive idling or low speed operation as experienced in inner city driving, e.g., taxi, door to door delivery.
F = Caravan or trailer towing.
G = Extended heavy load high speed operation in outside temperatures above 35°C.
H = When driving more than 250,000 km per 5 years.

Extra services required

Change engine oil and filter @ 6 months	**A**							
Change auto trans fluid and strainer @ 4 years	**A**							
Change automatic transmission fluid and strainer @ 20,000 km					**E**	**F**	**G**	
Inspect front suspension and steering for leaks, wear or damage @ 5,000 km		**B**	**C**					
Replace engine oil and filter @ 5,000 km or 3 months (whichever comes first)		**B**						
Change engine oil @ 5,000 km or 3 months (whichever comes first)		**B**		**D**		**F**	**G**	
Replace air cleaner element @ 20,000 km		**B**						
Inspect and clean park brake linings @ 20,000 km		**B**	**C**					
Change differential oil @ 20,000 km						**F**	**G**	
Change brake fluid @ 1 year if 1,600 kg (or higher) tow bar fitted *						**F**		
Change power steering fluid @ 50,000 km						**F**	**G**	
V8 engine only: change engine coolant								**H**
Carbon canister: Inspect @ 20,000 km and change @ 80,000 km		**B**	**C**					
V6 only: Inspect propshaft coupling @ 10,000km after 160,000 km of abnormal operating conditions						**F**	**G**	

* Brake fluid deteriorates with time and should normally be replaced every two years. However, heavy duty towing requires fresher fluid due to the higher demand on the brake system. Therefore, brake fluid should be replaced each year if a 1,600 kg (or higher) tow bar is fitted, so that the brake system can cope with the next year's towing requirements.

ABNORMAL OPERATING CONDITIONS cont.

The following record coupons are for servicing under abnormal conditions, refer previous page for definition.

Date .... km .... Servicing Dealer ....
Items performed: ....
....

Date .... km .... Servicing Dealer ....
Items performed: ....
....

Date .... km .... Servicing Dealer ....
Items performed: ....
....

Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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ABNORMAL OPERATING CONDITIONS cont.

The following record coupons are for servicing under abnormal conditions, refer page 12-4 for definition.

Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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Date .... km .... Servicing Dealer ....
Items performed: ....
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MAINTENANCE SCHEDULE

x 1,000 km	1.5	10	20	30	40	50	60	70	80	90	100	110
Under bonnet												
*Change engine oil and engine oil filter.	-	X	X	X	X	X	X	X	X	X	X	X
Check fluid levels: brake, clutch, power steer, auto trans, washer. Check coolant % with tester and check level (pressure test if low level).	X	-	X	X	X	X	X	X	X	X	X	X
Check battery electrolyte and fluid level, if applicable.	X	X	X	X	X	X	X	X	X	X	X	X
Engine accessory drive belts. Check length indicator and belt condition.	-	-	-	-	-	X	-	X	-	X	-	X
Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.	X	-	X	X	X	X	X	X	X	X	X	X
(V6 engines) Drain and refill cooling system with recommended inhibitor. Clean outside of the radiator and A/C condensor.	Change required every 2.5 years (regardless of kms)											
*(V8 engines) Drain and refill cooling system with recommended inhibitor. Clean outside of the radiator and A/C condenser.	Change every 5 years											
*Replace engine air cleaner element.	-	-	-	-	X	-	-	-	X	-	-	-
(Supercharger) Check supercharger oil level.	-	-	-	-	-	X	-	-	-	-	X	-
(V6 engines) Replace spark plugs.	-	-	-	-	X	-	-	-	X	-	-	-
(V8 engines) Replace spark plugs.	-	-	-	-	-	-	-	-	X	-	-	-

*Items marked with the asterisk require additional servicing under some driving conditions. Please refer page 12-4.

MAINTENANCE SCHEDULE cont.

x 1,000 km	1.5	10	20	30	40	50	60	70	80	90	100	110
Under car												
Replace fuel filter and retainer.	-	-	-	-	X	-	-	-	X	-	-	-
Check rear axle oil level.	-	-	-	-	X	-	-	-	X	-	-	-
Check rear axle and auto trans for leaks.	X	X	X	X	X	X	X	X	X	X	X	X
*Change auto trans fluid and strainer.	-	-	-	-	-	-	-	-	-	-	-	X
Manual trans. Check oil level.	Oil level check not required,											
Manual trans. Check for leaks.	X	-	X	X	X	X	X	X	X	X	X	X
*Change differential oil.	Change not required under normal driving conditions.											
Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.	-	-	X	X	X	X	X	X	X	X	X	X
*Park brake, check linings & drums for wear.	-	-	-	-	X	-	-	-	X	-	-	-
Inspect tyres for irregular wear or damage. Check for damaged wheels. Check air pressures.	X	X	X	X	X	X	X	X	X	X	X	X
*Drain, refill and bleed brake system. Check brake performance when road testing.	Change every 2 years (regardless of km) under normal driving conditions.											
Drain, refill and bleed clutch system.	Change every 2 years (regardless of km)											
Check all brake and fuel lines and hoses for condition, attachment and routing.	X	-	X	X	X	X	X	X	X	X	X	X
*Inspect front and rear suspension & steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing, leaks, etc. Check condition of all rubber boots and covers.	X	-	X	X	X	X	X	X	X	X	X	X
Inspect exhaust & adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.	X	-	X	X	X	X	X	X	X	X	X	X

*Items marked with the asterisk require additional servicing under some driving conditions. Please refer page 12-4.

MAINTENANCE SCHEDULE cont.

x 1,000 km	1.5	10	20	30	40	50	60	70	80	90	100	110
Under car cont.												
Inspect constant velocity joint for damaged or torn boot.	-	-	X	X	X	X	X	X	X	X	X	X
Clean and lubricate auto trans shift linkage.	-	-	-	X	-	-	-	X	-	-	-	X
*Check carbon canister for leaks or restrictions.	X	-	-	-	-	X	-	-	-	X	-	-
Inspect air cond. drain tubes for blockage.	-	-	-	-	X	-	-	-	X	-	-	-
Inspect sunroof drain holes for blockage.	-	X	X	X	X	X	X	X	X	X	X	X
Car interior												
Check park brake operations.	-	X	X	X	X	X	X	X	X	X	X	X
Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.	-	-	X	-	X	-	X	-	X	-	X	-
Reset "Service due" light.	X	X	X	X	X	X	X	X	X	X	X	X
Car exterior												
Check operation of all exterior lights.	X	X	X	X	X	X	X	X	X	X	X	X
Lubricate bonnet catch, hinges and lock cylinders.	-	-	X	-	X	-	X	-	X	-	X	-
Check transmitter range of security system.	-	X	X	X	X	X	X	X	X	X	X	X
Road test												
Check braking, steering, engine response & transmission operation. Check operation of cruise control. Check park pawl operation. Check A/C performance. Check neutral start switch.	X	X	X	X	X	X	X	X	X	X	X	X

*Items marked with the asterisk require additional servicing under some driving conditions. Please refer page 12-4.

SERVICE CHARGES

1,500 km
free

10,000 km
Labour: 0.5 hours
add 0.3 hours if wheels rotated and balanced
Parts: engine oil filter
Lubricants: engine oil

20,000 km
Labour: 0.8 hours
add 0.2 hours if wheels balanced
Parts: engine oil filter
Lubricants: engine oil

30,000 km
Labour: 0.6 hours
add 0.2 hours if wheels balanced
Parts: engine oil filter
Lubricants: engine oil

40,000 km
Labour: 1.4 hours for V6 engine;
1.1 hours for V8 engine
add 0.2 hours if wheels balanced
Parts: engine oil filter; (V6) spark plugs; air cleaner element; fuel filter
Lubricants: engine oil

50,000 km
Labour: 0.7 hours
add 0.2 hours if wheels balanced
Parts: engine oil filter
Lubricants: engine oil

60,000 km
Labour: 0.8 hours
add 0.2 hours if wheels balanced
Parts: engine oil filter
Lubricants: engine oil

70,000 km
Labour: 0.7 hours
add 0.2 hours if wheels balanced
Parts: engine oil filter
Lubricants: engine oil

80,000 km
Labour: 1.4 hours for V6 engine;
1.5 hours for V8 engine
add 0.2 hours if wheels balanced
Parts: engine oil filter; spark plugs; air cleaner element; fuel filter
Lubricants: engine oil

90,000 km
Labour: 0.7 hours
add 0.2 hours if wheels balanced
Parts: engine oil filter
Lubricants: engine oil

100,000 km
Labour: 0.8 hours
add 0.2 hours if wheels balanced
Parts: engine oil filter
Lubricants: engine oil

110,000 km
Labour: 0.7 hours
add 0.3 for auto
add 0.2 hours if wheels balanced
Parts: engine oil filter; auto strainer and gasket
Lubricants: engine oil; auto trans fluid

120,000 km
Labour: 1.5 hours for V6 engine;
1.2 hours for V8 engine
add 0.2 hours if wheels balanced
Parts: engine oil filter; (V6) spark plugs; air cleaner element; fuel filter
Lubricants: engine oil

130,000 km
Labour: 0.7 hours
Parts: engine oil filter
Lubricants: engine oil

140,000 km
Labour: 0.8 hours
Parts: engine oil filter
Lubricants: engine oil

SERVICE CHARGES cont.

150,000 km

Labour: 0.7 hours
add 0.2 hours if wheels balanced

Parts: engine oil filter

Lubricants: engine oil

160,000 km

Labour: 1.5 hours for V6 engine;
1.6 hours for V8 engine
add 0.2 hours if wheels balanced

Parts: engine oil filter; spark plugs; air cleaner element; fuel filter

Lubricants: engine oil

170,000 km

Labour: 0.7 hours
add 0.2 hours if wheels balanced

Parts: engine oil filter

Lubricants: engine oil

180,000 km

Labour: 0.8 hours
add 0.2 hours if wheels balanced

Parts: engine oil filter

Lubricants: engine oil

190,000 km

Labour: 0.7 hours
add 0.2 hours if wheels balanced

Parts: engine oil filter

Lubricants: engine oil

200,000 km

Labour: 1.5 hours for V6 engine;
1.2 hours for V8 engine
add 0.2 hours if wheels balanced

Parts: engine oil filter; (V6) spark plugs; air cleaner element; fuel filter

Lubricants: engine oil

In addition to the times, parts and lubricants listed above, the following operations will be charged for, when required, on a calendar time basis:

Brake fluid must be changed every 2 years (add charge for brake fluid and 0.4 hours labour)

Clutch fluid must be changed every 2 years (add charge for clutch fluid and 0.2 hours labour)

Engine coolant with V6 engine: must be changed every 2½ years (add charge 0.4 hours labour, engine coolant and pellets).

Engine coolant with V8 engine: must be changed every 5 years (add charge 0.4 hours labour and engine coolant).

- The owner is charged for all lubricants and materials used plus labour at the times recommended on the previous pages.
- LPG maintenance labour times and parts, as shown in the LPG supplement, are additional to the charges shown in the maintenance schedule in this Owner's Handbook.
- The repair or replacement of any part found faulty during a service check and not covered by Holden Warranty is added to the charges.

  Where any deficiencies are noted, such items should be reported to the owner/operator so that the extra work required can be authorised.
- The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended; their use not only increases operating costs, but may indeed be harmful to your car.

1,500km Service Validation

This car has been thoroughly checked in accordance with the 1,500 km/one month service.

Dealer ....

Service Manager's signature ....

Odometer reading ....

Date ....

1,500km Service Coupon

This coupon should not be removed until the car is presented for service.

Owner's Name
Mr.
Mrs. ....
Miss.
Other...........

Address ....
Town ....
State .... Postcode ....
Reg. no. .... Engine no ....
I.S.O.V.I.N. .... Model ....
Selling Dealer's Stamp & Signature ....

Date of Acquisition ....

This car has been thoroughly checked in accordance with the schedule on the reverse side of this coupon.

Servicing Dealer's Stamp & Signature ....

Servicing Dealer ....
Town .... State ....

Owner's signature ....

This service is provided FREE of charge.

Under bonnet

☐ Check fluid levels: engine oil, brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

Under car

☐ Check rear axle and auto trans for leaks.

☐ Manual transmission. Check for leaks.

☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.

☐ Check all brake and fuel lines and hoses for condition, attachment and routing.

☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.

☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.

☐ Check carbon canister for leaks or restrictions.

Car interior

☐ Reset "Service Due" light.

Car exterior

☐ Check operation of all exterior lights.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

Refer to LPG supplement for additional servicing if LPG is fitted.

10,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.5 hours labour
- engine oil and engine oil filter
- add 0.3 hours if wheels rotated and balanced

Holden recommend that wheels be rotated and balanced at 10,000km when driving under high load, when towing or with sustained highway driving.
Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature ....   Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, power steering, clutch, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

Under car

☐ Check rear axle and auto trans for leaks.

☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.

☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.

☐ Reset "Service Due" light.

Servicing Dealer .... Additional services performed: ....

Brake fluid changed: YES/NO   Clutch fluid changed YES/NO ....

Coolant changed: YES/NO ....

Date of Service .... Odometer ....

Signed ....

10,000km Service Validation

Car exterior

☐ Check operation of all exterior lights.

☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

20,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.8 hours labour
- engine oil and engine oil filter
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature ....   Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

Under car

☐ Check rear axle and auto trans for leaks.

☐ Manual transmission. Check for leaks.

20,000km Service Validation

Servicing Dealer .... Additional services performed: ....
Brake fluid changed: YES/NO   Clutch fluid changed YES/NO   ....
Coolant changed: YES/NO ....
Date of Service .... Odometer ....
....
Signed ....

Under car cont.

☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required. Balance if required.

☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.

☐ Check all brake and fuel lines and hoses for condition, attachment and routing.

☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.

☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.

☐ Inspect CV joint for damaged or torn boot.

☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.

☐ Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.

☐ Reset "Service Due" light.

Car exterior

☐ Check operation of all exterior lights.

☐ Lubricate hood catch, door hinges and all lock cylinders.

☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

30,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.6 hours labour
- engine oil and engine oil filter
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

Under car

☐ Check rear axle and auto trans for leaks.

☐ Manual transmission. Check for leaks.

☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.

☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.

30,000km Service Validation

Servicing Dealer ....

Brake fluid changed: YES/NO Clutch fluid changed YES/NO

Coolant changed: YES/NO

Date of Service .... Odometer ....

Signed ....

Additional services performed: ....

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Under car cont.

☐ Check all brake and fuel lines and hoses for condition, attachment and routing.

☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.

☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.

☐ Inspect CV joint for damaged or torn boot.

☐ Clean and lubricate auto trans shift linkage.

☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.

☐ Reset "Service Due" light.

Car exterior

☐ Check operation of all exterior lights.

☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

40,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 1.4 hours labour for V6 engine; 1.1 hours for V8 engine
- engine oil and engine oil filter
- air cleaner element
- spark plugs (if car fitted with V6 engine)
- fuel filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Replace engine air cleaner element.

☐ (V6 engines) Replace spark plugs.

☐ Brake fluid. **Change at 2 years (regardless of km)**
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. **Change at 2 years (regardless of km)**
Drain, refill and bleed clutch system. Check clutch performance when road testing.

40,000km Service Validation

Servicing Dealer ....
Brake fluid changed: YES/NO Clutch fluid changed YES/NO
Coolant changed: YES/NO
Date of Service .... Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

Under car

☐ Replace fuel filter and retainer.
☐ Check rear axle oil level.
☐ Check rear axle and auto trans for leaks.
☐ Manual transmission. Check for leaks.
☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
☐ Parking brake - check linings and drums for wear.
☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
☐ Inspect CV joint for damaged or torn boot.
☐ Inspect A/C drain tubes for blockage.
☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.
☐ Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.
☐ Reset "Service Due" light.

Car exterior

☐ Check operation of all exterior lights.
☐ Lubricate hood catch, door hinges and all lock cylinders.
☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

50,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.7 hours
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Engine accessory drive belts. Check length indicator and belt condition.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ (Supercharger) Check supercharger oil level.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

50,000km Service Validation

Servicing Dealer ....
Brake fluid changed: YES/NO
Clutch fluid changed YES/NO
Coolant changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....

Under car

☐ Check rear axle and auto trans for leaks.

☐ Manual transmission. Check for leaks.

☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.

☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.

☐ Check all brake and fuel lines and hoses for condition, attachment and routing.

☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.

☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.

☐ Inspect CV joint for damaged or torn boot.

☐ Check carbon canister for leaks or restrictions.

☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.

☐ Reset "Service Due" light.

Car exterior

☐ Check operation of all exterior lights.

☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

60,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.8 hours
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

Servicing Dealer .... Additional services performed: ....

Brake fluid changed: YES/NO Clutch fluid changed YES/NO ....

Coolant changed: YES/NO ....

Date of Service .... Odometer ....

....

Signed ....

60,000km Service Validation

Under car

- ☐ Check rear axle and auto trans for leaks.
- ☐ Manual transmission. Check for leaks.
- ☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
- ☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
- ☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
- ☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
- ☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
- ☐ Inspect CV joint for damaged or torn boot.
- ☐ Inspect sunroof drain holes for blockage.

Car interior

- ☐ Check park brake operation.
- ☐ Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.
- ☐ Reset "Service Due" light.

Car exterior

- ☐ Check operation of all exterior lights.
- ☐ Lubricate hood catch, door hinges and all lock cylinders.
- ☐ Check transmitter range of security system.

Road test

- ☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

70,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.7 hours
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

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Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Engine accessory drive belts. Check length indicator and belt condition.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

70,000km Service Validation

Servicing Dealer ....

Brake fluid changed: YES/NO Clutch fluid changed YES/NO

Coolant changed: YES/NO

Date of Service .... Odometer ....

Signed ....

Additional services performed: ....

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Under car

- ☐ Check rear axle and auto trans for leaks.
- ☐ Manual transmission. Check for leaks.
- ☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
- ☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
- ☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
- ☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
- ☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
- ☐ Inspect CV joint for damaged or torn boot.
- ☐ Clean and lubricate auto trans shift linkage.
- ☐ Inspect sunroof drain holes for blockage.

Car interior

- ☐ Check park brake operation.
- ☐ Reset "Service Due" light.

Car exterior

- ☐ Check operation of all exterior lights.
- ☐ Check transmitter range of security system.

Road test

- ☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

80,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:
- 1.4 hours for V6 engine; 1.5 hours for V8 engine
- engine oil and engine oil filter
- air cleaner element
- fuel filter
- spark plugs
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

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Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, auto trans, clutch, power steering, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Replace engine air cleaner element.

☐ Replace spark plugs.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

80,000km Service Validation

Servicing Dealer ....

Additional services performed: ....

Brake fluid changed: YES/NO Clutch fluid changed YES/NO

Coolant changed: YES/NO

Date of Service .... Odometer ....

Signed ....

Under car

- ☐ Replace fuel filter and retainer.
- ☐ Check rear axle oil level.
- ☐ Check rear axle and auto trans for leaks.
- ☐ Manual transmission. Check for leaks.
- ☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
- ☐ Parking brake - check linings and drums for wear.
- ☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
- ☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
- ☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
- ☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
- ☐ Inspect CV joint for damaged or torn boot.
- ☐ Inspect A/C drain tubes for blockage.
- ☐ Inspect sunroof drain holes for blockage.

Car interior

- ☐ Check park brake operation.
- ☐ Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.
- ☐ Reset "Service Due" light.

Car exterior

- ☐ Check operation of all exterior lights.
- ☐ Lubricate hood catch, door hinges and all lock cylinders.
- ☐ Check transmitter range of security system.

Road test

- ☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

90,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.7 hours; add 0.1 for V8 engine
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

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Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Engine accessory drive belts. Check length indicator and belt condition.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

Servicing Dealer .... Additional services performed: ....

Brake fluid changed: YES/NO .... Clutch fluid changed YES/NO ....

Coolant changed: YES/NO ....

Date of Service .... Odometer ....

....

Signed ....

90,000km Service Validation

Under car

☐ Check rear axle and auto trans for leaks.

☐ Manual transmission. Check for leaks.

☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.

☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.

☐ Check all brake and fuel lines and hoses for condition, attachment and routing.

☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.

☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.

☐ Inspect CV joint for damaged or torn boot.

☐ Check carbon canister for leaks or restrictions.

☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.

☐ Reset "Service Due" light.

Car exterior

☐ Check operation of all exterior lights.

☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

100,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.8 hours
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

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Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ (Supercharger) Check supercharger oil level.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

100,000km Service Validation

Servicing Dealer .... Additional services performed: ....
Brake fluid changed: YES/NO .... Clutch fluid changed YES/NO ....
Coolant changed: YES/NO ....
Date of Service .... Odometer ....
....
Signed ....

Under car

☐ Check rear axle and auto trans for leaks.

☐ Manual transmission. Check for leaks.

☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.

☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.

☐ Check all brake and fuel lines and hoses for condition, attachment and routing.

☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.

☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.

☐ Inspect CV joint for damaged or torn boot.

☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.

☐ Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.

☐ Reset "Service Due" light.

Car exterior

☐ Check operation of all exterior lights.

☐ Lubricate hood catch, door hinges and all lock cylinders.

☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

110,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.7 hours; add 0.3 for auto trans.
- engine oil and engine oil filter
- if auto trans fitted: add auto trans strainer, gasket and fluid
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

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Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Engine accessory drive belts. Check length indicator and belt condition.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

110,000km Service Validation

Servicing Dealer .... Additional services performed: ....

Brake fluid changed: YES/NO Clutch fluid changed YES/NO ....

Coolant changed: YES/NO ....

Date of Service .... Odometer ....

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Signed ....

Under car

- ☐ Check rear axle and auto trans for leaks.
- ☐ Manual transmission. Check for leaks.
- ☐ Change auto trans fluid and strainer.
- ☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
- ☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
- ☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
- ☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
- ☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
- ☐ Inspect CV joint for damaged or torn boot.
- ☐ Clean and lubricate auto trans shift linkage.
- ☐ Inspect sunroof drain holes for blockage.

Car interior

- ☐ Check park brake operation.
- ☐ Reset "Service Due" light.

Car exterior

- ☐ Check operation of all exterior lights.
- ☐ Check transmitter range of security system.

Road test

- ☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

120,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:
- 1.5 hours for V6 engine; 1.2 hours for V8 engine
- engine oil and engine oil filter
- air cleaner element
- spark plugs (if car fitted with V6 engine)
- fuel filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

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Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Replace engine air cleaner element.

☐ (V6 engines) Replace spark plugs.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

120,000km Service Validation

Servicing Dealer ....
Additional services performed: ....
Brake fluid changed: YES/NO Clutch fluid changed YES/NO
Coolant changed: YES/NO
Date of Service .... Odometer ....
Signed ....

Under car

- ☐ Replace fuel filter and retainer.
- ☐ Check rear axle oil level.
- ☐ Check rear axle and auto trans for leaks.
- ☐ Manual transmission. Check for leaks.
- ☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
- ☐ Parking brake - check linings and drums for wear.
- ☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
- ☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
- ☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
- ☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
- ☐ Inspect CV joint for damaged or torn boot.
- ☐ Inspect A/C drain tubes for blockage.
- ☐ Inspect sunroof drain holes for blockage.

Car interior

- ☐ Check park brake operation.
- ☐ Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.
- ☐ Reset "Service Due" light.

Car exterior

- ☐ Check operation of all exterior lights.
- ☐ Lubricate hood catch, door hinges and all lock cylinders.
- ☐ Check transmitter range of security system.

Road test

- ☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

130,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.7 hours
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

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Signature.. Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Engine accessory drive belts. Check length indicator and belt condition.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

130,000km Service Validation

Servicing Dealer ....
Brake fluid changed: YES/NO Clutch fluid changed YES/NO
Coolant changed: YES/NO
Date of Service .... Odometer ....
Signed..

Additional services performed: ....
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Under car

- ☐ Check rear axle and auto trans for leaks.
- ☐ Manual transmission. Check for leaks.
- ☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
- ☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
- ☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
- ☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
- ☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
- ☐ Inspect CV joint for damaged or torn boot.
- ☐ Check carbon canister for leaks or restrictions.
- ☐ Inspect sunroof drain holes for blockage.

Car interior

- ☐ Check park brake operation.
- ☐ Reset "Service Due" light.

Car exterior

- ☐ Check operation of all exterior lights.
- ☐ Check transmitter range of security system.

Road test

- ☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

140,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.8 hours
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

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Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

140,000km Service Validation

Servicing Dealer ....

Brake fluid changed: YES/NO Clutch fluid changed YES/NO

Coolant changed: YES/NO

Date of Service .... Odometer ....

Signed ....

Additional services performed: ....

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Under car

☐ Check rear axle and auto trans for leaks.

☐ Manual transmission. Check for leaks.

☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.

☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.

☐ Check all brake and fuel lines and hoses for condition, attachment and routing.

☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.

☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.

☐ Inspect CV joint for damaged or torn boot.

☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.

☐ Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.

☐ Reset "Service Due" light.

Car exterior

☐ Check operation of all exterior lights.

☐ Lubricate hood catch, door hinges and all lock cylinders.

☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

150,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.7 hours
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

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Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Engine accessory drive belts. Check length indicator and belt condition.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ (Supercharger) Check supercharger oil level.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

150,000km
Service Validation

Servicing Dealer .... Additional services performed: ....

Brake fluid changed: YES/NO .... Clutch fluid changed YES/NO ....

Coolant changed: YES/NO ....

Date of Service .... Odometer ....

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Signed ....

Under car

☐ Check rear axle and auto trans for leaks.

☐ Manual transmission. Check for leaks.

☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.

☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.

☐ Check all brake and fuel lines and hoses for condition, attachment and routing.

☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.

☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.

☐ Inspect CV joint for damaged or torn boot.

☐ Clean and lubricate auto trans shift linkage.

☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.

☐ Reset "Service Due" light

Car exterior

☐ Check operation of all exterior lights.

☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

160,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 1.5 hours for V6 engine; 1.6 hours for V8 engine
- engine oil and engine oil filter
- air cleaner element
- fuel filter
- spark plugs
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Replace engine air cleaner element.

☐ Replace spark plugs.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

160,000km Service Validation

Servicing Dealer .... Additional services performed: ....
Brake fluid changed: YES/NO Clutch fluid changed YES/NO ....
Coolant changed: YES/NO ....
Date of Service .... Odometer ....
....
Signed ....

Under car

☐ Replace fuel filter and retainer.
☐ Check rear axle oil level.
☐ Check rear axle and auto trans for leaks.
☐ Manual transmission. Check for leaks.
☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
☐ Parking brake - check linings and drums for wear.
☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
☐ Inspect CV joint for damaged or torn boot.
☐ Inspect A/C drain tubes for blockage.
☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.
☐ Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.
☐ Reset "Service Due" light.

Car exterior

☐ Check operation of all exterior lights.
☐ Lubricate hood catch, door hinges and all lock cylinders.
☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

170,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.7 hours
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Engine accessory drive belts. Check length indicator and belt condition.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

170,000km Service Validation

Servicing Dealer .... Additional services performed: ....
Brake fluid changed: YES/NO .... Clutch fluid changed YES/NO ....
Coolant changed: YES/NO ....
Date of Service .... Odometer ....
Signed ....

Under car

- ☐ Check rear axle and auto trans for leaks.
- ☐ Manual transmission. Check for leaks.
- ☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
- ☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
- ☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
- ☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
- ☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
- ☐ Inspect CV joint for damaged or torn boot.
- ☐ Check carbon canister for leaks or restrictions.
- ☐ Inspect sunroof drain holes for blockage.

Car interior

- ☐ Check park brake operation.
- ☐ Reset "Service Due" light.

Car exterior

- ☐ Check operation of all exterior lights.
- ☐ Check transmitter range of security system.

Road test

- ☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

180,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.8 hours
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

180,000km Service Validation

Servicing Dealer .... Additional services performed: ....

Brake fluid changed: YES/NO Clutch fluid changed YES/NO ....

Coolant changed: YES/NO ....

Date of Service .... Odometer ....

....

Signed ....

Under car

☐ Check rear axle and auto trans for leaks.
☐ Manual transmission. Check for leaks.
☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
☐ Inspect CV joint for damaged or torn boot.
☐ Inspect sunroof drain holes for blockage.

Car interior

☐ Check park brake operation.
☐ Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.
☐ Reset "Service Due" light.

Car exterior

☐ Check operation of all exterior lights.
☐ Lubricate hood catch, door hinges and all lock cylinders.
☐ Check transmitter range of security system.

Road test

☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

190,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 0.7 hours
- engine oil and engine oil filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.

☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).

☐ Check battery electrolyte and fluid level.

☐ Engine accessory drive belts. Check length indicator and belt condition.

☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

Servicing Dealer .... Additional services performed: ....
Brake fluid changed: YES/NO   Clutch fluid changed YES/NO ....
Coolant changed: YES/NO ....
Date of Service .... Odometer ....
Signed ....

190,000km Service Validation

Under car

- ☐ Check rear axle and auto trans for leaks.
- ☐ Manual transmission. Check for leaks.
- ☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
- ☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
- ☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
- ☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
- ☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
- ☐ Inspect CV joint for damaged or torn boot.
- ☐ Clean and lubricate auto trans shift linkage.
- ☐ Inspect sunroof drain holes for blockage.

Car interior

- ☐ Check park brake operation.
- ☐ Reset "Service Due" light.

Car exterior

- ☐ Check operation of all exterior lights.
- ☐ Check transmitter range of security system.

Road test

- ☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

200,000 km Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for the time, parts and lubricants, as listed:

- 1.5 hours for V6 engine; 1.2 hours for V8 engine
- engine oil and engine oil filter
- air cleaner element
- spark plugs (if car fitted with V6 engine)
- fuel filter
- if brake fluid changed add 0.4 hours plus brake fluid
- if clutch fluid changed add 0.2 hours plus brake fluid
- if engine coolant changed add 0.4 hours plus coolant plus (for V6 engines only) coolant pellets
- add 0.2 hours if wheels balanced

Refer to LPG supplement for additional servicing if LPG is fitted. There will also be a charge for additional services as requested:

....

....

Signature .... Date ....

NOTE : If the owner/driver of this car has changed since the last service please complete the change notice at the introduction of this Handbook.

Under bonnet

☐ Change engine oil and engine oil filter.
☐ Check fluid levels: brake, clutch, power steering, auto trans, washer. Check coolant inhibitor % with tester and check level (pressure test if level is low).
☐ Check battery electrolyte and fluid level.
☐ Check for signs of deterioration and/or leaks from engine, fluid reservoirs, air ducts, all hoses and clamps.
☐ Replace engine air cleaner element.
☐ (Supercharger) Check supercharger oil level.
☐ (V6 engines) Replace spark plugs.

☐ Brake fluid. Change at 2 years (regardless of km)
Drain, refill and bleed brake system. Check brake performance when road testing.

☐ Clutch fluid. Change at 2 years (regardless of km)
Drain, refill and bleed clutch system. Check clutch performance when road testing.

☐ Engine Coolant.
V6 engines: Change at 2.5 years (regardless of km)
V8 engines: Change at 5 years
Drain and refill cooling system (with recommended coolant). Clean outside of the radiator and A/C condenser.

200,000km Service Validation

Servicing Dealer .... Additional services performed: ....
Brake fluid changed: YES/NO .... Clutch fluid changed YES/NO ....
Coolant changed: YES/NO ....
Date of Service .... Odometer ....
Signed ....

Under car

- ☐ Replace fuel filter and retainer.
- ☐ Check rear axle oil level.
- ☐ Check rear axle and auto trans for leaks.
- ☐ Manual transmission. Check for leaks.
- ☐ Inspect front and rear disc pads for wear and discs for surface condition. Rotate wheels. Balance if required.
- ☐ Parking brake - check linings and drums for wear.
- ☐ Inspect tyres for irregular wear or damage, check for damaged wheels. Check air pressures.
- ☐ Check all brake and fuel lines and hoses for condition, attachment and routing.
- ☐ Inspect front and rear suspension and steering system for damaged, loose or missing parts, signs of wear or lack of lubrication. Inspect power steering lines and hoses for condition, attachment and routing leaks, etc. Check condition of all rubber boots and covers.
- ☐ Inspect exhaust system and adjacent underbody. Look for damaged, missing or out-of-position parts, open seams, holes or loose connections.
- ☐ Inspect CV joint for damaged or torn boot.
- ☐ Inspect A/C drain tubes for blockage.
- ☐ Inspect sunroof drain holes for blockage.

Car interior

- ☐ Check park brake operation.
- ☐ Seat belt inspection. Check webbing condition, buckle operation and retractor mechanism operation.
- ☐ Reset "Service Due" light.

Car exterior

- ☐ Check operation of all exterior lights.
- ☐ Lubricate hood catch, door hinges and all lock cylinders.
- ☐ Check transmitter range of security system.

Road test

- ☐ Check for braking, steering, engine response and transmission operation. Check operation of cruise control. Check park lock operation. Check A/C performance. Check neutral start switch.

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